REPUBLIK INDONESIA
KEMENTERIAN HUKUM DAN HAK ASASI MANUSIA

SURAT PENCATATAN
CIPTAAN

Dalam rangka pelindungan ciptaan di bidang ilmu pengetahuan, seni dan sastra berdasarkan Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta, dengan ini menerangkan:

Nomor dan tanggal permohonan	:	EC00202167948, 23 November 2021
Pencipta		
Nama	:	**Nendra Mursetya Somasih Dwipa dan Padrul Jana**
Alamat	:	Perum Denggung Asri No. 5 RT 001/ RW 035 Tridadi , Sleman, DI YOGYAKARTA, 55511
Kewarganegaraan	:	Indonesia
Pemegang Hak Cipta		
Nama	:	**Nendra Mursetya Somasih Dwipa dan Padrul Jana**
Alamat	:	Perum Denggung Asri No. 5 RT 001/ RW 035 Tridadi Sleman, Sleman, DI YOGYAKARTA, 55511
Kewarganegaraan	:	Indonesia
Jenis Ciptaan	:	**Program Komputer**
Judul Ciptaan	:	**Program Pembentukan Portofolio Multiobjektif Berbasis R**
Tanggal dan tempat diumumkan untuk pertama kali di wilayah Indonesia atau di luar wilayah Indonesia	:	20 November 2021, di Yogyakarta
Jangka waktu pelindungan	:	Berlaku selama 50 (lima puluh) tahun sejak Ciptaan tersebut pertama kali dilakukan Pengumuman.
Nomor pencatatan	:	000301744

adalah benar berdasarkan keterangan yang diberikan oleh Pemohon.
Surat Pencatatan Hak Cipta atau produk Hak terkait ini sesuai dengan Pasal 72 Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta.

a.n Menteri Hukum dan Hak Asasi Manusia
Direktur Jenderal Kekayaan Intelektual
u.b.
Direktur Hak Cipta dan Desain Industri

Dr. Syarifuddin, S.T., M.H.
NIP.197112182002121001

Disclaimer:
Dalam hal pemohon memberikan keterangan tidak sesuai dengan surat pernyataan, Menteri berwenang untuk mencabut surat pencatatan permohonan.

SYNTAX Program Pembentukan Portofolio Multiobjektif Berbasis R

```
#IMPORT DATA
library(readxl)
saham1 <- read_excel("saham1.xlsx")
saham2 <- read_excel("saham2.xlsx")
saham3 <- read_excel("saham3.xlsx")
saham4 <- read_excel("saham4.xlsx")
saham5 <- read_excel("saham5.xlsx")
saham6 <- read_excel("saham6.xlsx")
saham7 <- read_excel("saham7.xlsx")
saham8 <- read_excel("saham8.xlsx")
saham9 <- read_excel("saham9.xlsx")
saham10 <- read_excel("saham10.xlsx")

#DATA SAHAM1.JK
data.saham1=as.matrix(saham1)
data.saham1
saham1open=data.saham1[,3]
saham1open=as.numeric(saham1open)
saham1high=data.saham1[,4]
saham1high=as.numeric(saham1high)
saham1low=data.saham1[,5]
saham1low=as.numeric(saham1low)
saham1close=data.saham1[,6]
saham1close=as.numeric(saham1close)
```

```
#ritmin(a)
kurangsaham11=saham1low-saham1high
ritmin.saham1=kurangsaham11/saham1high
a.saham1=ritmin.saham1

#ritav1(b)
kurangsaham12=saham1low-saham1open
ritav1.saham1=kurangsaham12/saham1open
b.saham1=ritav1.saham1

#ritav2(c)
kurangsaham13=saham1close-saham1low
ritav2.saham1=kurangsaham13/saham1low
c.saham1=ritav2.saham1

#ritmax(d)
kurangsaham14=saham1high-saham1low
ritmax.saham1=kurangsaham14/saham1low
d.saham1=ritmax.saham1

#r1t Saham 1
r1t.saham1=data.frame(a.saham1,b.saham1,c.saham1,d.saham1)
r1t.saham1

#mencari ri (a,b,c,d) saham1
n.saham1=length(a.saham1)
ri.a.saham1=sum(a.saham1/n.saham1)
ri.b.saham1=sum(b.saham1/n.saham1)
ri.c.saham1=sum(c.saham1/n.saham1)
```

```
ri.d.saham1=sum(d.saham1/n.saham1)
ri.saham1=data.frame(ri.a.saham1,ri.b.saham1,ri.c.saham1,ri.d.saham1)
ri.saham1

#=========================================================

#DATA SAHAM2.JK

data.saham2=as.matrix(saham2)
data.saham2
saham2open=data.saham2[,3]
saham2open=as.numeric(saham2open)
saham2high=data.saham2[,4]
saham2high=as.numeric(saham2high)
saham2low=data.saham2[,5]
saham2low=as.numeric(saham2low)
saham2close=data.saham2[,6]
saham2close=as.numeric(saham2close)

#ritmin(a)
kurangsaham21=saham2low-saham2high
ritmin.saham2=kurangsaham21/saham2high
a.saham2=ritmin.saham2

#ritav1(b)
kurangsaham22=saham2low-saham2open
ritav1.saham2=kurangsaham22/saham2open
b.saham2=ritav1.saham2
```

```
#ritav2(c)
kurangsaham23=saham2close-saham2low
ritav2.saham2=kurangsaham23/saham2low
c.saham2=ritav2.saham2

#ritmax(d)
kurangsaham24=saham2high-saham2low
ritmax.saham2=kurangsaham24/saham2low
d.saham2=ritmax.saham2

#r2t Saham 2
r2t.saham2=data.frame(a.saham2,b.saham2,c.saham2,d.saham2)
r2t.saham2

#mencari ri (a,b,c,d) saham2
n.saham2=length(a.saham2)
ri.a.saham2=sum(a.saham2/n.saham2)
ri.b.saham2=sum(b.saham2/n.saham2)
ri.c.saham2=sum(c.saham2/n.saham2)
ri.d.saham2=sum(d.saham2/n.saham2)
ri.saham2=data.frame(ri.a.saham2,ri.b.saham2,ri.c.saham2,ri.d.saham2)
ri.saham2

#=========================================================

#DATA SAHAM3.JK

data.saham3=as.matrix(saham3)
data.saham3
```

```
saham3open=data.saham3[,3]
saham3open=as.numeric(saham3open)
saham3high=data.saham3[,4]
saham3high=as.numeric(saham3high)
saham3low=data.saham3[,5]
saham3low=as.numeric(saham3low)
saham3close=data.saham3[,6]
saham3close=as.numeric(saham3close)

#ritmin(a)
kurangsaham31=saham3low-saham3high
ritmin.saham3=kurangsaham31/saham3high
a.saham3=ritmin.saham3

#ritav1(b)
kurangsaham32=saham3low-saham3open
ritav1.saham3=kurangsaham32/saham3open
b.saham3=ritav1.saham3

#ritav2(c)
kurangsaham33=saham3close-saham3low
ritav2.saham3=kurangsaham33/saham3low
c.saham3=ritav2.saham3

#ritmax(d)
kurangsaham34=saham3high-saham3low
ritmax.saham3=kurangsaham34/saham3low
d.saham3=ritmax.saham3
```

```
#r3t Saham 3
r3t.saham3=data.frame(a.saham3,b.saham3,c.saham3,d.saham3)
r3t.saham3



#mencari ri (a,b,c,d) saham3
n.saham3=length(a.saham3)
ri.a.saham3=sum(a.saham3/n.saham3)
ri.b.saham3=sum(b.saham3/n.saham3)
ri.c.saham3=sum(c.saham3/n.saham3)
ri.d.saham3=sum(d.saham3/n.saham3)
ri.saham3=data.frame(ri.a.saham3,ri.b.saham3,ri.c.saham3,ri.d.saham3)
ri.saham3



#=========================================================
#DATA SAHAM4.JK

data.saham4=as.matrix(saham4)
data.saham4
saham4open=data.saham4[,3]
saham4open=as.numeric(saham4open)
saham4high=data.saham4[,4]
saham4high=as.numeric(saham4high)
saham4low=data.saham4[,5]
saham4low=as.numeric(saham4low)
saham4close=data.saham4[,6]
saham4close=as.numeric(saham4close)
```

```
#ritmin(a)
kurangsaham41=saham4low-saham4high
ritmin.saham4=kurangsaham41/saham4high
a.saham4=ritmin.saham4

#ritav1(b)
kurangsaham42=saham4low-saham4open
ritav1.saham4=kurangsaham42/saham4open
b.saham4=ritav1.saham4

#ritav2(c)
kurangsaham43=saham4close-saham4low
ritav2.saham4=kurangsaham43/saham4low
c.saham4=ritav2.saham4

#ritmax(d)
kurangsaham44=saham4high-saham4low
ritmax.saham4=kurangsaham44/saham4low
d.saham4=ritmax.saham4

#r4t Saham 4
r4t.saham4=data.frame(a.saham4,b.saham4,c.saham4,d.saham4)
r4t.saham4


#mencari ri (a,b,c,d) saham4
n.saham4=length(a.saham4)
ri.a.saham4=sum(a.saham4/n.saham4)
ri.b.saham4=sum(b.saham4/n.saham4)
```

```
ri.c.saham4=sum(c.saham4/n.saham4)
ri.d.saham4=sum(d.saham4/n.saham4)
ri.saham4=data.frame(ri.a.saham4,ri.b.saham4,ri.c.saham4,ri.d.saham4)
ri.saham4
#=========================================================


#DATA SAHAM5.JK

data.saham5=as.matrix(saham5)
data.saham5
saham5open=data.saham5[,3]
saham5open=as.numeric(saham5open)
saham5high=data.saham5[,4]
saham5high=as.numeric(saham5high)
saham5low=data.saham5[,5]
saham5low=as.numeric(saham5low)
saham5close=data.saham5[,6]
saham5close=as.numeric(saham5close)

#ritmin(a)
kurangsaham51=saham5low-saham5high
ritmin.saham5=kurangsaham51/saham5high
a.saham5=ritmin.saham5

#ritav1(b)
kurangsaham52=saham5low-saham5open
ritav1.saham5=kurangsaham52/saham5open
b.saham5=ritav1.saham5
```

```
#ritav2(c)
kurangsaham53=saham5close-saham5low
ritav2.saham5=kurangsaham53/saham5low
c.saham5=ritav2.saham5

#ritmax(d)
kurangsaham54=saham5high-saham5low
ritmax.saham5=kurangsaham54/saham5low
d.saham5=ritmax.saham5

#r5t Saham 5
r5t.saham5=data.frame(a.saham5,b.saham5,c.saham5,d.saham5)
r5t.saham5


#mencari ri (a,b,c,d) saham5
n.saham5=length(a.saham5)
ri.a.saham5=sum(a.saham5/n.saham5)
ri.b.saham5=sum(b.saham5/n.saham5)
ri.c.saham5=sum(c.saham5/n.saham5)
ri.d.saham5=sum(d.saham5/n.saham5)
ri.saham5=data.frame(ri.a.saham5,ri.b.saham5,ri.c.saham5,ri.d.saham5)
ri.saham5
#=========================================================


#DATA SAHAM6.JK
```

```
data.saham6=as.matrix(saham6)
data.saham6
saham6open=data.saham6[,3]
saham6open=as.numeric(saham6open)
saham6high=data.saham6[,4]
saham6high=as.numeric(saham6high)
saham6low=data.saham6[,5]
saham6low=as.numeric(saham6low)
saham6close=data.saham6[,6]
saham6close=as.numeric(saham6close)

#ritmin(a)
kurangsaham61=saham6low-saham6high
ritmin.saham6=kurangsaham61/saham6high
a.saham6=ritmin.saham6

#ritav1(b)
kurangsaham62=saham6low-saham6open
ritav1.saham6=kurangsaham62/saham6open
b.saham6=ritav1.saham6

#ritav2(c)
kurangsaham63=saham6close-saham6low
ritav2.saham6=kurangsaham63/saham6low
c.saham6=ritav2.saham6

#ritmax(d)
kurangsaham64=saham6high-saham6low
ritmax.saham6=kurangsaham64/saham6low
```

```
d.saham6=ritmax.saham6

#r6t Saham 6
r6t.saham6=data.frame(a.saham6,b.saham6,c.saham6,d.saham6)
r6t.saham6



#mencari ri (a,b,c,d) saham6
n.saham6=length(a.saham6)
ri.a.saham6=sum(a.saham6/n.saham6)
ri.b.saham6=sum(b.saham6/n.saham6)
ri.c.saham6=sum(c.saham6/n.saham6)
ri.d.saham6=sum(d.saham6/n.saham6)
ri.saham6=data.frame(ri.a.saham6,ri.b.saham6,ri.c.saham6,ri.d.saham6)
ri.saham6
#=========================================================


#DATA SAHAM7.JK

data.saham7=as.matrix(saham7)
data.saham7
saham7open=data.saham7[,3]
saham7open=as.numeric(saham7open)
saham7high=data.saham7[,4]
saham7high=as.numeric(saham7high)
saham7low=data.saham7[,5]
saham7low=as.numeric(saham7low)
saham7close=data.saham7[,6]
```

```
saham7close=as.numeric(saham7close)

#ritmin(a)
kurangsaham71=saham7low-saham7high
ritmin.saham7=kurangsaham71/saham7high
a.saham7=ritmin.saham7

#ritav1(b)
kurangsaham72=saham7low-saham7open
ritav1.saham7=kurangsaham72/saham7open
b.saham7=ritav1.saham7

#ritav2(c)
kurangsaham73=saham7close-saham7low
ritav2.saham7=kurangsaham73/saham7low
c.saham7=ritav2.saham7

#ritmax(d)
kurangsaham74=saham7high-saham7low
ritmax.saham7=kurangsaham74/saham7low
d.saham7=ritmax.saham7

#r7t Saham 7
r7t.saham7=data.frame(a.saham7,b.saham7,c.saham7,d.saham7)
r7t.saham7

#mencari ri (a,b,c,d) saham7
n.saham7=length(a.saham7)
ri.a.saham7=sum(a.saham7/n.saham7)
```

```
ri.b.saham7=sum(b.saham7/n.saham7)
ri.c.saham7=sum(c.saham7/n.saham7)
ri.d.saham7=sum(d.saham7/n.saham7)
ri.saham7=data.frame(ri.a.saham7,ri.b.saham7,ri.c.saham7,ri.d.saham7)
ri.saham7
#=========================================================

#DATA SAHAM8.JK

data.saham8=as.matrix(saham8)
data.saham8
saham8open=data.saham8[,3]
saham8open=as.numeric(saham8open)
saham8high=data.saham8[,4]
saham8high=as.numeric(saham8high)
saham8low=data.saham8[,5]
saham8low=as.numeric(saham8low)
saham8close=data.saham8[,6]
saham8close=as.numeric(saham8close)

#ritmin(a)
kurangsaham81=saham8low-saham8high
ritmin.saham8=kurangsaham81/saham8high
a.saham8=ritmin.saham8

#ritav1(b)
kurangsaham82=saham8low-saham8open
ritav1.saham8=kurangsaham82/saham8open
b.saham8=ritav1.saham8
```

```
#ritav2(c)
kurangsaham83=saham8close-saham8low
ritav2.saham8=kurangsaham83/saham8low
c.saham8=ritav2.saham8

#ritmax(d)
kurangsaham84=saham8high-saham8low
ritmax.saham8=kurangsaham84/saham8low
d.saham8=ritmax.saham8

#r8t Saham 8
r8t.saham8=data.frame(a.saham8,b.saham8,c.saham8,d.saham8)
r8t.saham8

#mencari ri (a,b,c,d) saham8
n.saham8=length(a.saham8)
ri.a.saham8=sum(a.saham8/n.saham8)
ri.b.saham8=sum(b.saham8/n.saham8)
ri.c.saham8=sum(c.saham8/n.saham8)
ri.d.saham8=sum(d.saham8/n.saham8)
ri.saham8=data.frame(ri.a.saham8,ri.b.saham8,ri.c.saham8,ri.d.saham8)
ri.saham8
#==========================================================

#DATA SAHAM9.JK

data.saham9=as.matrix(saham9)
data.saham9
```

```
saham9open=data.saham9[,3]
saham9open=as.numeric(saham9open)
saham9high=data.saham9[,4]
saham9high=as.numeric(saham9high)
saham9low=data.saham9[,5]
saham9low=as.numeric(saham9low)
saham9close=data.saham9[,6]
saham9close=as.numeric(saham9close)

#ritmin(a)
kurangsaham91=saham9low-saham9high
ritmin.saham9=kurangsaham91/saham9high
a.saham9=ritmin.saham9

#ritav1(b)
kurangsaham92=saham9low-saham9open
ritav1.saham9=kurangsaham92/saham9open
b.saham9=ritav1.saham9

#ritav2(c)
kurangsaham93=saham9close-saham9low
ritav2.saham9=kurangsaham93/saham9low
c.saham9=ritav2.saham9

#ritmax(d)
kurangsaham94=saham9high-saham9low
ritmax.saham9=kurangsaham94/saham9low
d.saham9=ritmax.saham9
```

```
#r9t Saham 9
r9t.saham9=data.frame(a.saham9,b.saham9,c.saham9,d.saham9)
r9t.saham9


#mencari ri (a,b,c,d) saham9
n.saham9=length(a.saham9)
ri.a.saham9=sum(a.saham9/n.saham9)
ri.b.saham9=sum(b.saham9/n.saham9)
ri.c.saham9=sum(c.saham9/n.saham9)
ri.d.saham9=sum(d.saham9/n.saham9)
ri.saham9=data.frame(ri.a.saham9,ri.b.saham9,ri.c.saham9,ri.d.saham9)
ri.saham9
#=========================================================


#DATA SAHAM10.JK

data.saham10=as.matrix(saham10)
data.saham10
saham10open=data.saham10[,3]
saham10open=as.numeric(saham10open)
saham10high=data.saham10[,4]
saham10high=as.numeric(saham10high)
saham10low=data.saham10[,5]
saham10low=as.numeric(saham10low)
saham10close=data.saham10[,6]
saham10close=as.numeric(saham10close)
```

```
#ritmin(a)
kurangsaham101=saham10low-saham10high
ritmin.saham10=kurangsaham101/saham10high
a.saham10=ritmin.saham10

#ritav1(b)
kurangsaham102=saham10low-saham10open
ritav1.saham10=kurangsaham102/saham10open
b.saham10=ritav1.saham10

#ritav2(c)
kurangsaham103=saham10close-saham10low
ritav2.saham10=kurangsaham103/saham10low
c.saham10=ritav2.saham10

#ritmax(d)
kurangsaham104=saham10high-saham10low
ritmax.saham10=kurangsaham104/saham10low
d.saham10=ritmax.saham10

#r10t Saham 10
r10t.saham10=data.frame(a.saham10,b.saham10,c.saham10,d.saham10)
r10t.saham10


#mencari ri (a,b,c,d) saham10
n.saham10=length(a.saham10)
ri.a.saham10=sum(a.saham10/n.saham10)
ri.b.saham10=sum(b.saham10/n.saham10)
```

```
ri.c.saham10=sum(c.saham10/n.saham10)
ri.d.saham10=sum(d.saham10/n.saham10)
ri.saham10=data.frame(ri.a.saham10,ri.b.saham10,ri.c.saham10,ri.d.saham10)
ri.saham10
#============================================================
#MENAMPILKAN rit SEMUA SAHAM
rit.saham1
rit.saham2
rit.saham3
rit.saham4
rit.saham5
rit.saham6
rit.saham7
rit.saham8
rit.saham9
rit.saham10
#============================================================
#MENAMPILKAN ri SEMUA SAHAM
ri.saham1
ri.saham2
ri.saham3
ri.saham4
ri.saham5
ri.saham6
ri.saham7
ri.saham8
ri.saham9
ri.saham10
#DATA FRAME ri.saham
```

```
names(ri.saham1)[names(ri.saham1) == "ri.a.saham1"] <- "a"
names(ri.saham1)[names(ri.saham1) == "ri.b.saham1"] <- "b"
names(ri.saham1)[names(ri.saham1) == "ri.c.saham1"] <- "c"
names(ri.saham1)[names(ri.saham1) == "ri.d.saham1"] <- "d"

names(ri.saham2)[names(ri.saham2) == "ri.a.saham2"] <- "a"
names(ri.saham2)[names(ri.saham2) == "ri.b.saham2"] <- "b"
names(ri.saham2)[names(ri.saham2) == "ri.c.saham2"] <- "c"
names(ri.saham2)[names(ri.saham2) == "ri.d.saham2"] <- "d"

names(ri.saham3)[names(ri.saham3) == "ri.a.saham3"] <- "a"
names(ri.saham3)[names(ri.saham3) == "ri.b.saham3"] <- "b"
names(ri.saham3)[names(ri.saham3) == "ri.c.saham3"] <- "c"
names(ri.saham3)[names(ri.saham3) == "ri.d.saham3"] <- "d"

names(ri.saham4)[names(ri.saham4) == "ri.a.saham4"] <- "a"
names(ri.saham4)[names(ri.saham4) == "ri.b.saham4"] <- "b"
names(ri.saham4)[names(ri.saham4) == "ri.c.saham4"] <- "c"
names(ri.saham4)[names(ri.saham4) == "ri.d.saham4"] <- "d"

names(ri.saham5)[names(ri.saham5) == "ri.a.saham5"] <- "a"
names(ri.saham5)[names(ri.saham5) == "ri.b.saham5"] <- "b"
names(ri.saham5)[names(ri.saham5) == "ri.c.saham5"] <- "c"
names(ri.saham5)[names(ri.saham5) == "ri.d.saham5"] <- "d"

names(ri.saham6)[names(ri.saham6) == "ri.a.saham6"] <- "a"
names(ri.saham6)[names(ri.saham6) == "ri.b.saham6"] <- "b"
names(ri.saham6)[names(ri.saham6) == "ri.c.saham6"] <- "c"
names(ri.saham6)[names(ri.saham6) == "ri.d.saham6"] <- "d"
```

```
names(ri.saham7)[names(ri.saham7) == "ri.a.saham7"] <- "a"
names(ri.saham7)[names(ri.saham7) == "ri.b.saham7"] <- "b"
names(ri.saham7)[names(ri.saham7) == "ri.c.saham7"] <- "c"
names(ri.saham7)[names(ri.saham7) == "ri.d.saham7"] <- "d"

names(ri.saham8)[names(ri.saham8) == "ri.a.saham8"] <- "a"
names(ri.saham8)[names(ri.saham8) == "ri.b.saham8"] <- "b"
names(ri.saham8)[names(ri.saham8) == "ri.c.saham8"] <- "c"
names(ri.saham8)[names(ri.saham8) == "ri.d.saham8"] <- "d"

names(ri.saham9)[names(ri.saham9) == "ri.a.saham9"] <- "a"
names(ri.saham9)[names(ri.saham9) == "ri.b.saham9"] <- "b"
names(ri.saham9)[names(ri.saham9) == "ri.c.saham9"] <- "c"
names(ri.saham9)[names(ri.saham9) == "ri.d.saham9"] <- "d"

names(ri.saham10)[names(ri.saham10) == "ri.a.saham10"] <- "a"
names(ri.saham10)[names(ri.saham10) == "ri.b.saham10"] <- "b"
names(ri.saham10)[names(ri.saham10) == "ri.c.saham10"] <- "c"
names(ri.saham10)[names(ri.saham10) == "ri.d.saham10"] <- "d"


ri.saham=rbind.data.frame(ri.saham1,ri.saham2,ri.saham3, ri.saham4,ri.saham5,
                          ri.saham6,ri.saham7,ri.saham8,ri.saham9,ri.saham10)
row.names(ri.saham)=c("Saham 1", "Saham 2", "Saham 3", "Saham 4","Saham 5",
                      "Saham 6","Saham 7","Saham 8","Saham 9","Saham 10")
ri.saham

#rp (w) return portfolio fuzzy
```

```
#====================================================================

#sij varian kovarian fuzzy portofolio
#rit-ri
a.r1tminr1= r1t.saham1[,1]-ri.saham1[,4]

b.r1tminr1= r1t.saham1[,2]-ri.saham1[,3]

c.r1tminr1= r1t.saham1[,3]-ri.saham1[,2]

d.r1tminr1= r1t.saham1[,4]-ri.saham1[,1]
r1tminr1.abcd=data.frame(a.r1tminr1,b.r1tminr1,c.r1tminr1,d.r1tminr1)

#====================================================================
a.r2tminr2= r2t.saham2[,1]-ri.saham2[,4]

b.r2tminr2= r2t.saham2[,2]-ri.saham2[,3]

c.r2tminr2= r2t.saham2[,3]-ri.saham2[,2]

d.r2tminr2= r2t.saham2[,4]-ri.saham2[,1]
r2tminr2.abcd=data.frame(a.r2tminr2,b.r2tminr2,c.r2tminr2,d.r2tminr2)
#====================================================================
a.r3tminr3= r3t.saham3[,1]-ri.saham3[,4]

b.r3tminr3= r3t.saham3[,2]-ri.saham3[,3]

c.r3tminr3= r3t.saham3[,3]-ri.saham3[,2]
```

```
d.r3tminr3= r3t.saham3[,4]-ri.saham3[,1]
r3tminr3.abcd=data.frame(a.r3tminr3,b.r3tminr3,c.r3tminr3,d.r3tminr3)
#=====================================================================
a.r4tminr4= r4t.saham4[,1]-ri.saham4[,4]

b.r4tminr4= r4t.saham4[,2]-ri.saham4[,3]

c.r4tminr4= r4t.saham4[,3]-ri.saham4[,2]

d.r4tminr4= r4t.saham4[,4]-ri.saham4[,1]
r4tminr4.abcd=data.frame(a.r4tminr4,b.r4tminr4,c.r4tminr4,d.r4tminr4)
#=====================================================================
a.r5tminr5= r5t.saham5[,1]-ri.saham5[,4]

b.r5tminr5= r5t.saham5[,2]-ri.saham5[,3]

c.r5tminr5= r5t.saham5[,3]-ri.saham5[,2]

d.r5tminr5= r5t.saham5[,4]-ri.saham5[,1]
r5tminr5.abcd=data.frame(a.r5tminr5,b.r5tminr5,c.r5tminr5,d.r5tminr5)
#=====================================================================
a.r6tminr6= r6t.saham6[,1]-ri.saham6[,4]

b.r6tminr6= r6t.saham6[,2]-ri.saham6[,3]

c.r6tminr6= r6t.saham6[,3]-ri.saham6[,2]

d.r6tminr6= r6t.saham6[,4]-ri.saham6[,1]
```

```
r6tminr6.abcd=data.frame(a.r6tminr6,b.r6tminr6,c.r6tminr6,d.r6tminr6)
#=================================================================
a.r7tminr7= r7t.saham7[,1]-ri.saham7[,4]

b.r7tminr7= r7t.saham7[,2]-ri.saham7[,3]

c.r7tminr7= r7t.saham7[,3]-ri.saham7[,2]

d.r7tminr7= r7t.saham7[,4]-ri.saham7[,1]
r7tminr7.abcd=data.frame(a.r7tminr7,b.r7tminr7,c.r7tminr7,d.r7tminr7)
#=================================================================
a.r8tminr8= r8t.saham8[,1]-ri.saham8[,4]

b.r8tminr8= r8t.saham8[,2]-ri.saham8[,3]

c.r8tminr8= r8t.saham8[,3]-ri.saham8[,2]

d.r8tminr8= r8t.saham8[,4]-ri.saham8[,1]
r8tminr8.abcd=data.frame(a.r8tminr8,b.r8tminr8,c.r8tminr8,d.r8tminr8)
#=================================================================
a.r9tminr9= r9t.saham9[,1]-ri.saham9[,4]

b.r9tminr9= r9t.saham9[,2]-ri.saham9[,3]

c.r9tminr9= r9t.saham9[,3]-ri.saham9[,2]

d.r9tminr9= r9t.saham9[,4]-ri.saham9[,1]
r9tminr9.abcd=data.frame(a.r9tminr9,b.r9tminr9,c.r9tminr9,d.r9tminr9)
#=================================================================
```

```
a.r10tminr10= r10t.saham10[,1]-ri.saham10[,4]

b.r10tminr10= r10t.saham10[,2]-ri.saham10[,3]

c.r10tminr10= r10t.saham10[,3]-ri.saham10[,2]

d.r10tminr10= r10t.saham10[,4]-ri.saham10[,1]
r10tminr10.abcd=data.frame(a.r10tminr10,b.r10tminr10,c.r10tminr10,d.r10tminr10)
#=========================================================================
#MENCARI S11
#A3
a3.inisiasi.s11=data.frame(a.r1tminr1*a.r1tminr1,a.r1tminr1*d.r1tminr1,
                    d.r1tminr1*a.r1tminr1,d.r1tminr1*d.r1tminr1)
a3.inisiasi.s11

a3.s11.in=vector()
for(h in 1:n.saham1){
  a3.s11.in[h]=min(a3.inisiasi.s11[h,])
}
a3.s11.in
a3.s11=sum(a3.s11.in)/n.saham1
a3.s11
#B3
b3.inisiasi.s11=data.frame(b.r1tminr1*b.r1tminr1,b.r1tminr1*c.r1tminr1,
                    c.r1tminr1*b.r1tminr1,c.r1tminr1*c.r1tminr1)
b3.inisiasi.s11

b3.s11.in=vector()
```

```
for(h in 1:n.saham1){
  b3.s11.in[h]=min(b3.inisiasi.s11[h,])
}
b3.s11.in
b3.s11=sum(b3.s11.in)/n.saham1
b3.s11
#C3
c3.inisiasi.s11=data.frame(b.r1tminr1*b.r1tminr1,b.r1tminr1*c.r1tminr1,
                           c.r1tminr1*b.r1tminr1,c.r1tminr1*c.r1tminr1)
c3.inisiasi.s11

c3.s11.in=vector()
for(h in 1:n.saham1){
  c3.s11.in[h]=max(b3.inisiasi.s11[h,])
}
c3.s11.in
c3.s11=sum(c3.s11.in)/n.saham1
c3.s11

#D3
d3.inisiasi.s11=data.frame(a.r1tminr1*a.r1tminr1,a.r1tminr1*d.r1tminr1,
                           d.r1tminr1*a.r1tminr1,d.r1tminr1*d.r1tminr1)
d3.inisiasi.s11

d3.s11.in=vector()
for(h in 1:n.saham1){
  d3.s11.in[h]=max(d3.inisiasi.s11[h,])
}
d3.s11.in
```

```
d3.s11=sum(d3.s11.in)/n.saham1
d3.s11

#S11
s11=data.frame(a3.s11,b3.s11,c3.s11,d3.s11)
s11
#=====================================================
#MENCARI S12
#A3
a3.inisiasi.s12=data.frame(a.r1tminr1*a.r2tminr2,a.r1tminr1*d.r2tminr2,
                           d.r1tminr1*a.r2tminr2,d.r1tminr1*d.r2tminr2)
a3.inisiasi.s12

a3.s12.in=vector()
for(h in 1:n.saham1){
  a3.s12.in[h]=min(a3.inisiasi.s12[h,])
}
a3.s12.in
a3.s12=sum(a3.s12.in)/n.saham1
a3.s12
#B3
b3.inisiasi.s12=data.frame(b.r1tminr1*b.r2tminr2,b.r1tminr1*c.r2tminr2,
                           c.r1tminr1*b.r2tminr2,c.r1tminr1*c.r2tminr2)
b3.inisiasi.s12

b3.s12.in=vector()
for(h in 1:n.saham1){
  b3.s12.in[h]=min(b3.inisiasi.s12[h,])
}
```

```
b3.s12.in
b3.s12=sum(b3.s12.in)/n.saham1
b3.s12
#C3
c3.inisiasi.s12=data.frame(b.r1tminr1*b.r1tminr1,b.r1tminr1*c.r1tminr1,
                    c.r1tminr1*b.r1tminr1,c.r1tminr1*c.r1tminr1)
c3.inisiasi.s12

c3.s12.in=vector()
for(h in 1:n.saham1){
  c3.s12.in[h]=max(b3.inisiasi.s12[h,])
}
c3.s12.in
c3.s12=sum(c3.s12.in)/n.saham1
c3.s12

#D3
d3.inisiasi.s12=data.frame(a.r1tminr1*a.r2tminr2,a.r1tminr1*d.r2tminr2,
                    d.r1tminr1*a.r2tminr2,d.r1tminr1*d.r2tminr2)
d3.inisiasi.s12

d3.s12.in=vector()
for(h in 1:n.saham1){
  d3.s12.in[h]=max(d3.inisiasi.s12[h,])
}
d3.s12.in
d3.s12=sum(d3.s12.in)/n.saham1
d3.s12
```

```
#S12
s12=data.frame(a3.s12,b3.s12,c3.s12,d3.s12)
s12
s21=s12
#=====================================================
#MENCARI S13
#A3
a3.inisiasi.s13=data.frame(a.r1tminr1*a.r3tminr3,a.r1tminr1*d.r3tminr3,
                           d.r1tminr1*a.r3tminr3,d.r1tminr1*d.r3tminr3)
a3.inisiasi.s13

a3.s13.in=vector()
for(h in 1:n.saham1){
  a3.s13.in[h]=min(a3.inisiasi.s13[h,])
}
a3.s13.in
a3.s13=sum(a3.s13.in)/n.saham1
a3.s13
#B3
b3.inisiasi.s13=data.frame(b.r1tminr1*b.r3tminr3,b.r1tminr1*c.r3tminr3,
                           c.r1tminr1*b.r3tminr3,c.r1tminr1*c.r3tminr3)
b3.inisiasi.s13

b3.s13.in=vector()
for(h in 1:n.saham1){
  b3.s13.in[h]=min(b3.inisiasi.s13[h,])
}
b3.s13.in
b3.s13=sum(b3.s13.in)/n.saham1
```

```
b3.s13
#C3
c3.inisiasi.s13=data.frame(b.r1tminr1*b.r1tminr1,b.r1tminr1*c.r1tminr1,
                           c.r1tminr1*b.r1tminr1,c.r1tminr1*c.r1tminr1)
c3.inisiasi.s13

c3.s13.in=vector()
for(h in 1:n.saham1){
  c3.s13.in[h]=max(b3.inisiasi.s13[h,])
}
c3.s13.in
c3.s13=sum(c3.s13.in)/n.saham1
c3.s13

#D3
d3.inisiasi.s13=data.frame(a.r1tminr1*a.r3tminr3,a.r1tminr1*d.r3tminr3,
                           d.r1tminr1*a.r3tminr3,d.r1tminr1*d.r3tminr3)
d3.inisiasi.s13

d3.s13.in=vector()
for(h in 1:n.saham1){
  d3.s13.in[h]=max(d3.inisiasi.s13[h,])
}
d3.s13.in
d3.s13=sum(d3.s13.in)/n.saham1
d3.s13

#S13
s13=data.frame(a3.s13,b3.s13,c3.s13,d3.s13)
```

```
s13
s31=s13
#=====================================================
#MENCARI S14
#A3
a3.inisiasi.s14=data.frame(a.r1tminr1*a.r4tminr4,a.r1tminr1*d.r4tminr4,
                           d.r1tminr1*a.r4tminr4,d.r1tminr1*d.r4tminr4)
a3.inisiasi.s14

a3.s14.in=vector()
for(h in 1:n.saham1){
  a3.s14.in[h]=min(a3.inisiasi.s14[h,])
}
a3.s14.in
a3.s14=sum(a3.s14.in)/n.saham1
a3.s14
#B3
b3.inisiasi.s14=data.frame(b.r1tminr1*b.r4tminr4,b.r1tminr1*c.r4tminr4,
                           c.r1tminr1*b.r4tminr4,c.r1tminr1*c.r4tminr4)
b3.inisiasi.s14

b3.s14.in=vector()
for(h in 1:n.saham1){
  b3.s14.in[h]=min(b3.inisiasi.s14[h,])
}
b3.s14.in
b3.s14=sum(b3.s14.in)/n.saham1
b3.s14
#C3
```

```
c3.inisiasi.s14=data.frame(b.r1tminr1*b.r4tminr4,b.r1tminr1*c.r4tminr4,
                           c.r1tminr1*b.r4tminr4,c.r1tminr1*c.r4tminr4)
c3.inisiasi.s14

c3.s14.in=vector()
for(h in 1:n.saham1){
  c3.s14.in[h]=max(b3.inisiasi.s14[h,])
}
c3.s14.in
c3.s14=sum(c3.s14.in)/n.saham1
c3.s14

#D3
d3.inisiasi.s14=data.frame(a.r1tminr1*a.r4tminr4,a.r1tminr1*d.r4tminr4,
                           d.r1tminr1*a.r4tminr4,d.r1tminr1*d.r4tminr4)
d3.inisiasi.s14

d3.s14.in=vector()
for(h in 1:n.saham1){
  d3.s14.in[h]=max(d3.inisiasi.s14[h,])
}
d3.s14.in
d3.s14=sum(d3.s14.in)/n.saham1
d3.s14

#S14
s14=data.frame(a3.s14,b3.s14,c3.s14,d3.s14)
s14
s41=s14
```

```
#====================================================
#MENCARI S15
#A3
a3.inisiasi.s15=data.frame(a.r1tminr1*a.r5tminr5,a.r1tminr1*d.r5tminr5,
                           d.r1tminr1*a.r5tminr5,d.r1tminr1*d.r5tminr5)
a3.inisiasi.s15

a3.s15.in=vector()
for(h in 1:n.saham1){
  a3.s15.in[h]=min(a3.inisiasi.s15[h,])
}
a3.s15.in
a3.s15=sum(a3.s15.in)/n.saham1
a3.s15
#B3
b3.inisiasi.s15=data.frame(b.r1tminr1*b.r5tminr5,b.r1tminr1*c.r5tminr5,
                           c.r1tminr1*b.r5tminr5,c.r1tminr1*c.r5tminr5)
b3.inisiasi.s15

b3.s15.in=vector()
for(h in 1:n.saham1){
  b3.s15.in[h]=min(b3.inisiasi.s15[h,])
}
b3.s15.in
b3.s15=sum(b3.s15.in)/n.saham1
b3.s15
#C3
c3.inisiasi.s15=data.frame(b.r1tminr1*b.r5tminr5,b.r1tminr1*c.r5tminr5,
                           c.r1tminr1*b.r5tminr5,c.r1tminr1*c.r5tminr5)
```

```
c3.inisiasi.s15


c3.s15.in=vector()
for(h in 1:n.saham1){
  c3.s15.in[h]=max(b3.inisiasi.s15[h,])
}
c3.s15.in
c3.s15=sum(c3.s15.in)/n.saham1
c3.s15


#D3
d3.inisiasi.s15=data.frame(a.r1tminr1*a.r5tminr5,a.r1tminr1*d.r5tminr5,
                           d.r1tminr1*a.r5tminr5,d.r1tminr1*d.r5tminr5)
d3.inisiasi.s15


d3.s15.in=vector()
for(h in 1:n.saham1){
  d3.s15.in[h]=max(d3.inisiasi.s15[h,])
}
d3.s15.in
d3.s15=sum(d3.s15.in)/n.saham1
d3.s15


#S15
s15=data.frame(a3.s15,b3.s15,c3.s15,d3.s15)
s15
s51=s15


#=====================================================
```

```
#MENCARI S16
#A3
a3.inisiasi.S16=data.frame(a.r1tminr1*a.r6tminr6,a.r1tminr1*d.r6tminr6,
                           d.r1tminr1*a.r6tminr6,d.r1tminr1*d.r6tminr6)
a3.inisiasi.S16

a3.S16.in=vector()
for(h in 1:n.saham1){
  a3.S16.in[h]=min(a3.inisiasi.S16[h,])
}
a3.S16.in
a3.S16=sum(a3.S16.in)/n.saham1
a3.S16
#B3
b3.inisiasi.S16=data.frame(b.r1tminr1*b.r6tminr6,b.r1tminr1*c.r6tminr6,
                           c.r1tminr1*b.r6tminr6,c.r1tminr1*c.r6tminr6)
b3.inisiasi.S16

b3.S16.in=vector()
for(h in 1:n.saham1){
  b3.S16.in[h]=min(b3.inisiasi.S16[h,])
}
b3.S16.in
b3.S16=sum(b3.S16.in)/n.saham1
b3.S16
#C3
c3.inisiasi.S16=data.frame(b.r1tminr1*b.r6tminr6,b.r1tminr1*c.r6tminr6,
                           c.r1tminr1*b.r6tminr6,c.r1tminr1*c.r6tminr6)
c3.inisiasi.S16
```

```
c3.S16.in=vector()
for(h in 1:n.saham1){
  c3.S16.in[h]=max(b3.inisiasi.S16[h,])
}
c3.S16.in
c3.S16=sum(c3.S16.in)/n.saham1
c3.S16

#D3
d3.inisiasi.S16=data.frame(a.r1tminr1*a.r6tminr6,a.r1tminr1*d.r6tminr6,
                           d.r1tminr1*a.r6tminr6,d.r1tminr1*d.r6tminr6)
d3.inisiasi.S16

d3.S16.in=vector()
for(h in 1:n.saham1){
  d3.S16.in[h]=max(d3.inisiasi.S16[h,])
}
d3.S16.in
d3.S16=sum(d3.S16.in)/n.saham1
d3.S16

#S16
S16=data.frame(a3.S16,b3.S16,c3.S16,d3.S16)
S16
s61=S16

#=====================================================
#MENCARI S17
```

```
#A3
a3.inisiasi.S17=data.frame(a.r1tminr1*a.r7tminr7,a.r1tminr1*d.r7tminr7,
                           d.r1tminr1*a.r7tminr7,d.r1tminr1*d.r7tminr7)
a3.inisiasi.S17

a3.S17.in=vector()
for(h in 1:n.saham1){
  a3.S17.in[h]=min(a3.inisiasi.S17[h,])
}
a3.S17.in
a3.S17=sum(a3.S17.in)/n.saham1
a3.S17
#B3
b3.inisiasi.S17=data.frame(b.r1tminr1*b.r7tminr7,b.r1tminr1*c.r7tminr7,
                           c.r1tminr1*b.r7tminr7,c.r1tminr1*c.r7tminr7)
b3.inisiasi.S17

b3.S17.in=vector()
for(h in 1:n.saham1){
  b3.S17.in[h]=min(b3.inisiasi.S17[h,])
}
b3.S17.in
b3.S17=sum(b3.S17.in)/n.saham1
b3.S17
#C3
c3.inisiasi.S17=data.frame(b.r1tminr1*b.r7tminr7,b.r1tminr1*c.r7tminr7,
                           c.r1tminr1*b.r7tminr7,c.r1tminr1*c.r7tminr7)
c3.inisiasi.S17
```

```
c3.S17.in=vector()
for(h in 1:n.saham1){
  c3.S17.in[h]=max(b3.inisiasi.S17[h,])
}
c3.S17.in
c3.S17=sum(c3.S17.in)/n.saham1
c3.S17

#D3
d3.inisiasi.S17=data.frame(a.r1tminr1*a.r7tminr7,a.r1tminr1*d.r7tminr7,
                           d.r1tminr1*a.r7tminr7,d.r1tminr1*d.r7tminr7)
d3.inisiasi.S17

d3.S17.in=vector()
for(h in 1:n.saham1){
  d3.S17.in[h]=max(d3.inisiasi.S17[h,])
}
d3.S17.in
d3.S17=sum(d3.S17.in)/n.saham1
d3.S17

#S17
S17=data.frame(a3.S17,b3.S17,c3.S17,d3.S17)
S17
S71=S17
#=====================================================
#MENCARI S18
#A3
a3.inisiasi.S18=data.frame(a.r1tminr1*a.r8tminr8,a.r1tminr1*d.r8tminr8,
```

```
                    d.r1tminr1*a.r8tminr8,d.r1tminr1*d.r8tminr8)
a3.inisiasi.S18


a3.S18.in=vector()
for(h in 1:n.saham1){
  a3.S18.in[h]=min(a3.inisiasi.S18[h,])
}
a3.S18.in
a3.S18=sum(a3.S18.in)/n.saham1
a3.S18
#B3
b3.inisiasi.S18=data.frame(b.r1tminr1*b.r8tminr8,b.r1tminr1*c.r8tminr8,
                    c.r1tminr1*b.r8tminr8,c.r1tminr1*c.r8tminr8)
b3.inisiasi.S18


b3.S18.in=vector()
for(h in 1:n.saham1){
  b3.S18.in[h]=min(b3.inisiasi.S18[h,])
}
b3.S18.in
b3.S18=sum(b3.S18.in)/n.saham1
b3.S18
#C3
c3.inisiasi.S18=data.frame(b.r1tminr1*b.r8tminr8,b.r1tminr1*c.r8tminr8,
                    c.r1tminr1*b.r8tminr8,c.r1tminr1*c.r8tminr8)
c3.inisiasi.S18


c3.S18.in=vector()
for(h in 1:n.saham1){
```

```
  c3.S18.in[h]=max(b3.inisiasi.S18[h,])
}
c3.S18.in
c3.S18=sum(c3.S18.in)/n.saham1
c3.S18

#D3
d3.inisiasi.S18=data.frame(a.r1tminr1*a.r8tminr8,a.r1tminr1*d.r8tminr8,
                           d.r1tminr1*a.r8tminr8,d.r1tminr1*d.r8tminr8)
d3.inisiasi.S18

d3.S18.in=vector()
for(h in 1:n.saham1){
  d3.S18.in[h]=max(d3.inisiasi.S18[h,])
}
d3.S18.in
d3.S18=sum(d3.S18.in)/n.saham1
d3.S18

#S18
S18=data.frame(a3.S18,b3.S18,c3.S18,d3.S18)
S18
S81=S18

#=====================================================
#MENCARI S19
#A3
a3.inisiasi.S19=data.frame(a.r1tminr1*a.r9tminr9,a.r1tminr1*d.r9tminr9,
                           d.r1tminr1*a.r9tminr9,d.r1tminr1*d.r9tminr9)
```

```
a3.inisiasi.S19


a3.S19.in=vector()
for(h in 1:n.saham1){
  a3.S19.in[h]=min(a3.inisiasi.S19[h,])
}
a3.S19.in
a3.S19=sum(a3.S19.in)/n.saham1
a3.S19
#B3
b3.inisiasi.S19=data.frame(b.r1tminr1*b.r9tminr9,b.r1tminr1*c.r9tminr9,
                           c.r1tminr1*b.r9tminr9,c.r1tminr1*c.r9tminr9)
b3.inisiasi.S19


b3.S19.in=vector()
for(h in 1:n.saham1){
  b3.S19.in[h]=min(b3.inisiasi.S19[h,])
}
b3.S19.in
b3.S19=sum(b3.S19.in)/n.saham1
b3.S19
#C3
c3.inisiasi.S19=data.frame(b.r1tminr1*b.r9tminr9,b.r1tminr1*c.r9tminr9,
                           c.r1tminr1*b.r9tminr9,c.r1tminr1*c.r9tminr9)
c3.inisiasi.S19


c3.S19.in=vector()
for(h in 1:n.saham1){
  c3.S19.in[h]=max(b3.inisiasi.S19[h,])
```

```
}
c3.S19.in
c3.S19=sum(c3.S19.in)/n.saham1
c3.S19

#D3
d3.inisiasi.S19=data.frame(a.r1tminr1*a.r9tminr9,a.r1tminr1*d.r9tminr9,
                           d.r1tminr1*a.r9tminr9,d.r1tminr1*d.r9tminr9)
d3.inisiasi.S19

d3.S19.in=vector()
for(h in 1:n.saham1){
  d3.S19.in[h]=max(d3.inisiasi.S19[h,])
}
d3.S19.in
d3.S19=sum(d3.S19.in)/n.saham1
d3.S19

#S19
S19=data.frame(a3.S19,b3.S19,c3.S19,d3.S19)
S19
S91=S19

#=====================================================
#MENCARI S110
#A3
a3.inisiasi.S110=data.frame(a.r1tminr1*a.r10tminr10,a.r1tminr1*d.r10tminr10,
                            d.r1tminr1*a.r10tminr10,d.r1tminr1*d.r10tminr10)
a3.inisiasi.S110
```

```
a3.S110.in=vector()
for(h in 1:n.saham1){
  a3.S110.in[h]=min(a3.inisiasi.S110[h,])
}
a3.S110.in
a3.S110=sum(a3.S110.in)/n.saham1
a3.S110
#B3
b3.inisiasi.S110=data.frame(b.r1tminr1*b.r10tminr10,b.r1tminr1*c.r10tminr10,
                            c.r1tminr1*b.r10tminr10,c.r1tminr1*c.r10tminr10)
b3.inisiasi.S110

b3.S110.in=vector()
for(h in 1:n.saham1){
  b3.S110.in[h]=min(b3.inisiasi.S110[h,])
}
b3.S110.in
b3.S110=sum(b3.S110.in)/n.saham1
b3.S110
#C3
c3.inisiasi.S110=data.frame(b.r1tminr1*b.r10tminr10,b.r1tminr1*c.r10tminr10,
                            c.r1tminr1*b.r10tminr10,c.r1tminr1*c.r10tminr10)
c3.inisiasi.S110

c3.S110.in=vector()
for(h in 1:n.saham1){
  c3.S110.in[h]=max(b3.inisiasi.S110[h,])
}
```

```
c3.S110.in
c3.S110=sum(c3.S110.in)/n.saham1
c3.S110

#D3
d3.inisiasi.S110=data.frame(a.r1tminr1*a.r10tminr10,a.r1tminr1*d.r10tminr10,
                    d.r1tminr1*a.r10tminr10,d.r1tminr1*d.r10tminr10)
d3.inisiasi.S110

d3.S110.in=vector()
for(h in 1:n.saham1){
  d3.S110.in[h]=max(d3.inisiasi.S110[h,])
}
d3.S110.in
d3.S110=sum(d3.S110.in)/n.saham1
d3.S110

#S110
S110=data.frame(a3.S110,b3.S110,c3.S110,d3.S110)
S110
S101=S110

#=====================================================
#MENCARI S22
#A3
a3.inisiasi.S22=data.frame(a.r2tminr2*a.r2tminr2,a.r2tminr2*d.r2tminr2,
                    d.r2tminr2*a.r2tminr2,d.r2tminr2*d.r2tminr2)
a3.inisiasi.S22
```

```
a3.S22.in=vector()
for(h in 1:n.saham1){
  a3.S22.in[h]=min(a3.inisiasi.S22[h,])
}
a3.S22.in
a3.S22=sum(a3.S22.in)/n.saham1
a3.S22
#B3
b3.inisiasi.S22=data.frame(b.r2tminr2*b.r2tminr2,b.r2tminr2*c.r2tminr2,
                           c.r2tminr2*b.r2tminr2,c.r2tminr2*c.r2tminr2)
b3.inisiasi.S22

b3.S22.in=vector()
for(h in 1:n.saham1){
  b3.S22.in[h]=min(b3.inisiasi.S22[h,])
}
b3.S22.in
b3.S22=sum(b3.S22.in)/n.saham1
b3.S22
#C3
c3.inisiasi.S22=data.frame(b.r2tminr2*b.r2tminr2,b.r2tminr2*c.r2tminr2,
                           c.r2tminr2*b.r2tminr2,c.r2tminr2*c.r2tminr2)
c3.inisiasi.S22

c3.S22.in=vector()
for(h in 1:n.saham1){
  c3.S22.in[h]=max(b3.inisiasi.S22[h,])
}
c3.S22.in
```

```
c3.S22=sum(c3.S22.in)/n.saham1
c3.S22

#D3
d3.inisiasi.S22=data.frame(a.r2tminr2*a.r2tminr2,a.r2tminr2*d.r2tminr2,
                           d.r2tminr2*a.r2tminr2,d.r2tminr2*d.r2tminr2)
d3.inisiasi.S22

d3.S22.in=vector()
for(h in 1:n.saham1){
  d3.S22.in[h]=max(d3.inisiasi.S22[h,])
}
d3.S22.in
d3.S22=sum(d3.S22.in)/n.saham1
d3.S22

#S22
S22=data.frame(a3.S22,b3.S22,c3.S22,d3.S22)
S22
S22=S22

#=====================================================
#MENCARI S23
#A3
a3.inisiasi.S23=data.frame(a.r2tminr2*a.r3tminr3,a.r2tminr2*d.r3tminr3,
                           d.r2tminr2*a.r3tminr3,d.r2tminr2*d.r3tminr3)
a3.inisiasi.S23

a3.S23.in=vector()
```

```
for(h in 1:n.saham1){
  a3.S23.in[h]=min(a3.inisiasi.S23[h,])
}
a3.S23.in
a3.S23=sum(a3.S23.in)/n.saham1
a3.S23
#B3
b3.inisiasi.S23=data.frame(b.r2tminr2*b.r3tminr3,b.r2tminr2*c.r3tminr3,
                           c.r2tminr2*b.r3tminr3,c.r2tminr2*c.r3tminr3)
b3.inisiasi.S23

b3.S23.in=vector()
for(h in 1:n.saham1){
  b3.S23.in[h]=min(b3.inisiasi.S23[h,])
}
b3.S23.in
b3.S23=sum(b3.S23.in)/n.saham1
b3.S23
#C3
c3.inisiasi.S23=data.frame(b.r2tminr2*b.r3tminr3,b.r2tminr2*c.r3tminr3,
                           c.r2tminr2*b.r3tminr3,c.r2tminr2*c.r3tminr3)
c3.inisiasi.S23

c3.S23.in=vector()
for(h in 1:n.saham1){
  c3.S23.in[h]=max(b3.inisiasi.S23[h,])
}
c3.S23.in
c3.S23=sum(c3.S23.in)/n.saham1
```

```
c3.S23

#D3
d3.inisiasi.S23=data.frame(a.r2tminr2*a.r3tminr3,a.r2tminr2*d.r3tminr3,
                           d.r2tminr2*a.r3tminr3,d.r2tminr2*d.r3tminr3)
d3.inisiasi.S23

d3.S23.in=vector()
for(h in 1:n.saham1){
  d3.S23.in[h]=max(d3.inisiasi.S23[h,])
}
d3.S23.in
d3.S23=sum(d3.S23.in)/n.saham1
d3.S23

#S23
S23=data.frame(a3.S23,b3.S23,c3.S23,d3.S23)
S23
S32=S23

#=====================================================
#MENCARI S24
#A3
a3.inisiasi.S24=data.frame(a.r2tminr2*a.r4tminr4,a.r2tminr2*d.r4tminr4,
                           d.r2tminr2*a.r4tminr4,d.r2tminr2*d.r4tminr4)
a3.inisiasi.S24

a3.S24.in=vector()
for(h in 1:n.saham1){
```

```
  a3.S24.in[h]=min(a3.inisiasi.S24[h,])
}
a3.S24.in
a3.S24=sum(a3.S24.in)/n.saham1
a3.S24
#B3
b3.inisiasi.S24=data.frame(b.r2tminr2*b.r4tminr4,b.r2tminr2*c.r4tminr4,
                           c.r2tminr2*b.r4tminr4,c.r2tminr2*c.r4tminr4)
b3.inisiasi.S24

b3.S24.in=vector()
for(h in 1:n.saham1){
  b3.S24.in[h]=min(b3.inisiasi.S24[h,])
}
b3.S24.in
b3.S24=sum(b3.S24.in)/n.saham1
b3.S24
#C3
c3.inisiasi.S24=data.frame(b.r2tminr2*b.r4tminr4,b.r2tminr2*c.r4tminr4,
                           c.r2tminr2*b.r4tminr4,c.r2tminr2*c.r4tminr4)
c3.inisiasi.S24

c3.S24.in=vector()
for(h in 1:n.saham1){
  c3.S24.in[h]=max(b3.inisiasi.S24[h,])
}
c3.S24.in
c3.S24=sum(c3.S24.in)/n.saham1
c3.S24
```

```
#D3
d3.inisiasi.S24=data.frame(a.r2tminr2*a.r4tminr4,a.r2tminr2*d.r4tminr4,
                           d.r2tminr2*a.r4tminr4,d.r2tminr2*d.r4tminr4)
d3.inisiasi.S24

d3.S24.in=vector()
for(h in 1:n.saham1){
  d3.S24.in[h]=max(d3.inisiasi.S24[h,])
}
d3.S24.in
d3.S24=sum(d3.S24.in)/n.saham1
d3.S24

#S24
S24=data.frame(a3.S24,b3.S24,c3.S24,d3.S24)
S24
S42=S24

#=====================================================
#MENCARI S25
#A3
a3.inisiasi.S25=data.frame(a.r2tminr2*a.r5tminr5,a.r2tminr2*d.r5tminr5,
                           d.r2tminr2*a.r5tminr5,d.r2tminr2*d.r5tminr5)
a3.inisiasi.S25

a3.S25.in=vector()
for(h in 1:n.saham1){
  a3.S25.in[h]=min(a3.inisiasi.S25[h,])
```

```
}
a3.S25.in
a3.S25=sum(a3.S25.in)/n.saham1
a3.S25
#B3
b3.inisiasi.S25=data.frame(b.r2tminr2*b.r5tminr5,b.r2tminr2*c.r5tminr5,
                           c.r2tminr2*b.r5tminr5,c.r2tminr2*c.r5tminr5)
b3.inisiasi.S25

b3.S25.in=vector()
for(h in 1:n.saham1){
  b3.S25.in[h]=min(b3.inisiasi.S25[h,])
}
b3.S25.in
b3.S25=sum(b3.S25.in)/n.saham1
b3.S25
#C3
c3.inisiasi.S25=data.frame(b.r2tminr2*b.r5tminr5,b.r2tminr2*c.r5tminr5,
                           c.r2tminr2*b.r5tminr5,c.r2tminr2*c.r5tminr5)
c3.inisiasi.S25

c3.S25.in=vector()
for(h in 1:n.saham1){
  c3.S25.in[h]=max(b3.inisiasi.S25[h,])
}
c3.S25.in
c3.S25=sum(c3.S25.in)/n.saham1
c3.S25
```

```
#D3
d3.inisiasi.S25=data.frame(a.r2tminr2*a.r5tminr5,a.r2tminr2*d.r5tminr5,
                           d.r2tminr2*a.r5tminr5,d.r2tminr2*d.r5tminr5)
d3.inisiasi.S25

d3.S25.in=vector()
for(h in 1:n.saham1){
  d3.S25.in[h]=max(d3.inisiasi.S25[h,])
}
d3.S25.in
d3.S25=sum(d3.S25.in)/n.saham1
d3.S25

#S25
S25=data.frame(a3.S25,b3.S25,c3.S25,d3.S25)
S25
S52=S25

#=====================================================
#MENCARI S26
#A3
a3.inisiasi.S26=data.frame(a.r2tminr2*a.r6tminr6,a.r2tminr2*d.r6tminr6,
                           d.r2tminr2*a.r6tminr6,d.r2tminr2*d.r6tminr6)
a3.inisiasi.S26

a3.S26.in=vector()
for(h in 1:n.saham1){
  a3.S26.in[h]=min(a3.inisiasi.S26[h,])
}
```

```
a3.S26.in
a3.S26=sum(a3.S26.in)/n.saham1
a3.S26
#B3
b3.inisiasi.S26=data.frame(b.r2tminr2*b.r6tminr6,b.r2tminr2*c.r6tminr6,
                           c.r2tminr2*b.r6tminr6,c.r2tminr2*c.r6tminr6)
b3.inisiasi.S26

b3.S26.in=vector()
for(h in 1:n.saham1){
  b3.S26.in[h]=min(b3.inisiasi.S26[h,])
}
b3.S26.in
b3.S26=sum(b3.S26.in)/n.saham1
b3.S26
#C3
c3.inisiasi.S26=data.frame(b.r2tminr2*b.r6tminr6,b.r2tminr2*c.r6tminr6,
                           c.r2tminr2*b.r6tminr6,c.r2tminr2*c.r6tminr6)
c3.inisiasi.S26

c3.S26.in=vector()
for(h in 1:n.saham1){
  c3.S26.in[h]=max(b3.inisiasi.S26[h,])
}
c3.S26.in
c3.S26=sum(c3.S26.in)/n.saham1
c3.S26

#D3
```

```
d3.inisiasi.S26=data.frame(a.r2tminr2*a.r6tminr6,a.r2tminr2*d.r6tminr6,
                           d.r2tminr2*a.r6tminr6,d.r2tminr2*d.r6tminr6)
d3.inisiasi.S26

d3.S26.in=vector()
for(h in 1:n.saham1){
  d3.S26.in[h]=max(d3.inisiasi.S26[h,])
}
d3.S26.in
d3.S26=sum(d3.S26.in)/n.saham1
d3.S26

#S26
S26=data.frame(a3.S26,b3.S26,c3.S26,d3.S26)
S26
S62=S26



#=====================================================
#MENCARI S27
#A3
a3.inisiasi.S27=data.frame(a.r2tminr2*a.r7tminr7,a.r2tminr2*d.r7tminr7,
                           d.r2tminr2*a.r7tminr7,d.r2tminr2*d.r7tminr7)
a3.inisiasi.S27

a3.S27.in=vector()
for(h in 1:n.saham1){
  a3.S27.in[h]=min(a3.inisiasi.S27[h,])
}
```

```
a3.S27.in
a3.S27=sum(a3.S27.in)/n.saham1
a3.S27
#B3
b3.inisiasi.S27=data.frame(b.r2tminr2*b.r7tminr7,b.r2tminr2*c.r7tminr7,
                          c.r2tminr2*b.r7tminr7,c.r2tminr2*c.r7tminr7)
b3.inisiasi.S27

b3.S27.in=vector()
for(h in 1:n.saham1){
  b3.S27.in[h]=min(b3.inisiasi.S27[h,])
}
b3.S27.in
b3.S27=sum(b3.S27.in)/n.saham1
b3.S27
#C3
c3.inisiasi.S27=data.frame(b.r2tminr2*b.r7tminr7,b.r2tminr2*c.r7tminr7,
                          c.r2tminr2*b.r7tminr7,c.r2tminr2*c.r7tminr7)
c3.inisiasi.S27

c3.S27.in=vector()
for(h in 1:n.saham1){
  c3.S27.in[h]=max(b3.inisiasi.S27[h,])
}
c3.S27.in
c3.S27=sum(c3.S27.in)/n.saham1
c3.S27

#D3
```

```
d3.inisiasi.S27=data.frame(a.r2tminr2*a.r7tminr7,a.r2tminr2*d.r7tminr7,
                           d.r2tminr2*a.r7tminr7,d.r2tminr2*d.r7tminr7)
d3.inisiasi.S27

d3.S27.in=vector()
for(h in 1:n.saham1){
  d3.S27.in[h]=max(d3.inisiasi.S27[h,])
}
d3.S27.in
d3.S27=sum(d3.S27.in)/n.saham1
d3.S27

#S27
S27=data.frame(a3.S27,b3.S27,c3.S27,d3.S27)
S27
S72=S27

#=====================================================
#MENCARI S28
#A3
a3.inisiasi.S28=data.frame(a.r2tminr2*a.r8tminr8,a.r2tminr2*d.r8tminr8,
                           d.r2tminr2*a.r8tminr8,d.r2tminr2*d.r8tminr8)
a3.inisiasi.S28

a3.S28.in=vector()
for(h in 1:n.saham1){
  a3.S28.in[h]=min(a3.inisiasi.S28[h,])
}
a3.S28.in
```

```
a3.S28=sum(a3.S28.in)/n.saham1
a3.S28
#B3
b3.inisiasi.S28=data.frame(b.r2tminr2*b.r8tminr8,b.r2tminr2*c.r8tminr8,
                          c.r2tminr2*b.r8tminr8,c.r2tminr2*c.r8tminr8)
b3.inisiasi.S28

b3.S28.in=vector()
for(h in 1:n.saham1){
  b3.S28.in[h]=min(b3.inisiasi.S28[h,])
}
b3.S28.in
b3.S28=sum(b3.S28.in)/n.saham1
b3.S28
#C3
c3.inisiasi.S28=data.frame(b.r2tminr2*b.r8tminr8,b.r2tminr2*c.r8tminr8,
                          c.r2tminr2*b.r8tminr8,c.r2tminr2*c.r8tminr8)
c3.inisiasi.S28

c3.S28.in=vector()
for(h in 1:n.saham1){
  c3.S28.in[h]=max(b3.inisiasi.S28[h,])
}
c3.S28.in
c3.S28=sum(c3.S28.in)/n.saham1
c3.S28

#D3
d3.inisiasi.S28=data.frame(a.r2tminr2*a.r8tminr8,a.r2tminr2*d.r8tminr8,
```

```
                    d.r2tminr2*a.r8tminr8,d.r2tminr2*d.r8tminr8)
d3.inisiasi.S28

d3.S28.in=vector()
for(h in 1:n.saham1){
  d3.S28.in[h]=max(d3.inisiasi.S28[h,])
}
d3.S28.in
d3.S28=sum(d3.S28.in)/n.saham1
d3.S28

#S28
S28=data.frame(a3.S28,b3.S28,c3.S28,d3.S28)
S28
S82=S28

#=====================================================
#MENCARI S29
#A3
a3.inisiasi.S29=data.frame(a.r2tminr2*a.r9tminr9,a.r2tminr2*d.r9tminr9,
                    d.r2tminr2*a.r9tminr9,d.r2tminr2*d.r9tminr9)
a3.inisiasi.S29

a3.S29.in=vector()
for(h in 1:n.saham1){
  a3.S29.in[h]=min(a3.inisiasi.S29[h,])
}
a3.S29.in
a3.S29=sum(a3.S29.in)/n.saham1
```

```
a3.S29
#B3
b3.inisiasi.S29=data.frame(b.r2tminr2*b.r9tminr9,b.r2tminr2*c.r9tminr9,
                           c.r2tminr2*b.r9tminr9,c.r2tminr2*c.r9tminr9)
b3.inisiasi.S29

b3.S29.in=vector()
for(h in 1:n.saham1){
  b3.S29.in[h]=min(b3.inisiasi.S29[h,])
}
b3.S29.in
b3.S29=sum(b3.S29.in)/n.saham1
b3.S29
#C3
c3.inisiasi.S29=data.frame(b.r2tminr2*b.r9tminr9,b.r2tminr2*c.r9tminr9,
                           c.r2tminr2*b.r9tminr9,c.r2tminr2*c.r9tminr9)
c3.inisiasi.S29

c3.S29.in=vector()
for(h in 1:n.saham1){
  c3.S29.in[h]=max(b3.inisiasi.S29[h,])
}
c3.S29.in
c3.S29=sum(c3.S29.in)/n.saham1
c3.S29

#D3
d3.inisiasi.S29=data.frame(a.r2tminr2*a.r9tminr9,a.r2tminr2*d.r9tminr9,
                           d.r2tminr2*a.r9tminr9,d.r2tminr2*d.r9tminr9)
```

```
d3.inisiasi.S29


d3.S29.in=vector()
for(h in 1:n.saham1){
  d3.S29.in[h]=max(d3.inisiasi.S29[h,])
}
d3.S29.in
d3.S29=sum(d3.S29.in)/n.saham1
d3.S29


#S29
S29=data.frame(a3.S29,b3.S29,c3.S29,d3.S29)
S29
S92=S29


#=====================================================
#MENCARI S210
#A3
a3.inisiasi.S210=data.frame(a.r2tminr2*a.r10tminr10,a.r2tminr2*d.r10tminr10,
                            d.r2tminr2*a.r10tminr10,d.r2tminr2*d.r10tminr10)
a3.inisiasi.S210


a3.S210.in=vector()
for(h in 1:n.saham1){
  a3.S210.in[h]=min(a3.inisiasi.S210[h,])
}
a3.S210.in
a3.S210=sum(a3.S210.in)/n.saham1
a3.S210
```

```
#B3
b3.inisiasi.S210=data.frame(b.r2tminr2*b.r10tminr10,b.r2tminr2*c.r10tminr10,
                           c.r2tminr2*b.r10tminr10,c.r2tminr2*c.r10tminr10)
b3.inisiasi.S210

b3.S210.in=vector()
for(h in 1:n.saham1){
  b3.S210.in[h]=min(b3.inisiasi.S210[h,])
}
b3.S210.in
b3.S210=sum(b3.S210.in)/n.saham1
b3.S210
#C3
c3.inisiasi.S210=data.frame(b.r2tminr2*b.r10tminr10,b.r2tminr2*c.r10tminr10,
                           c.r2tminr2*b.r10tminr10,c.r2tminr2*c.r10tminr10)
c3.inisiasi.S210

c3.S210.in=vector()
for(h in 1:n.saham1){
  c3.S210.in[h]=max(b3.inisiasi.S210[h,])
}
c3.S210.in
c3.S210=sum(c3.S210.in)/n.saham1
c3.S210

#D3
d3.inisiasi.S210=data.frame(a.r2tminr2*a.r10tminr10,a.r2tminr2*d.r10tminr10,
                           d.r2tminr2*a.r10tminr10,d.r2tminr2*d.r10tminr10)
d3.inisiasi.S210
```

```
d3.S210.in=vector()
for(h in 1:n.saham1){
  d3.S210.in[h]=max(d3.inisiasi.S210[h,])
}
d3.S210.in
d3.S210=sum(d3.S210.in)/n.saham1
d3.S210

#S210
S210=data.frame(a3.S210,b3.S210,c3.S210,d3.S210)
S210
S102=S210

#=====================================================
#MENCARI S33
#A3
a3.inisiasi.S33=data.frame(a.r3tminr3*a.r3tminr3,a.r3tminr3*d.r3tminr3,
                           d.r3tminr3*a.r3tminr3,d.r3tminr3*d.r3tminr3)
a3.inisiasi.S33

a3.S33.in=vector()
for(h in 1:n.saham1){
  a3.S33.in[h]=min(a3.inisiasi.S33[h,])
}
a3.S33.in
a3.S33=sum(a3.S33.in)/n.saham1
a3.S33
#B3
```

```
b3.inisiasi.S33=data.frame(b.r3tminr3*b.r3tminr3,b.r3tminr3*c.r3tminr3,
                           c.r3tminr3*b.r3tminr3,c.r3tminr3*c.r3tminr3)
b3.inisiasi.S33

b3.S33.in=vector()
for(h in 1:n.saham1){
  b3.S33.in[h]=min(b3.inisiasi.S33[h,])
}
b3.S33.in
b3.S33=sum(b3.S33.in)/n.saham1
b3.S33
#C3
c3.inisiasi.S33=data.frame(b.r3tminr3*b.r3tminr3,b.r3tminr3*c.r3tminr3,
                           c.r3tminr3*b.r3tminr3,c.r3tminr3*c.r3tminr3)
c3.inisiasi.S33

c3.S33.in=vector()
for(h in 1:n.saham1){
  c3.S33.in[h]=max(b3.inisiasi.S33[h,])
}
c3.S33.in
c3.S33=sum(c3.S33.in)/n.saham1
c3.S33

#D3
d3.inisiasi.S33=data.frame(a.r3tminr3*a.r3tminr3,a.r3tminr3*d.r3tminr3,
                           d.r3tminr3*a.r3tminr3,d.r3tminr3*d.r3tminr3)
d3.inisiasi.S33
```

```
d3.S33.in=vector()
for(h in 1:n.saham1){
  d3.S33.in[h]=max(d3.inisiasi.S33[h,])
}
d3.S33.in
d3.S33=sum(d3.S33.in)/n.saham1
d3.S33

#S33
S33=data.frame(a3.S33,b3.S33,c3.S33,d3.S33)
S33
S33=S33



#=====================================================
#MENCARI S34
#A3
a3.inisiasi.S34=data.frame(a.r3tminr3*a.r4tminr4,a.r3tminr3*d.r4tminr4,
                           d.r3tminr3*a.r4tminr4,d.r3tminr3*d.r4tminr4)
a3.inisiasi.S34

a3.S34.in=vector()
for(h in 1:n.saham1){
  a3.S34.in[h]=min(a3.inisiasi.S34[h,])
}
a3.S34.in
a3.S34=sum(a3.S34.in)/n.saham1
a3.S34
#B3
```

```
b3.inisiasi.S34=data.frame(b.r3tminr3*b.r4tminr4,b.r3tminr3*c.r4tminr4,
                           c.r3tminr3*b.r4tminr4,c.r3tminr3*c.r4tminr4)
b3.inisiasi.S34

b3.S34.in=vector()
for(h in 1:n.saham1){
  b3.S34.in[h]=min(b3.inisiasi.S34[h,])
}
b3.S34.in
b3.S34=sum(b3.S34.in)/n.saham1
b3.S34
#C3
c3.inisiasi.S34=data.frame(b.r3tminr3*b.r4tminr4,b.r3tminr3*c.r4tminr4,
                           c.r3tminr3*b.r4tminr4,c.r3tminr3*c.r4tminr4)
c3.inisiasi.S34

c3.S34.in=vector()
for(h in 1:n.saham1){
  c3.S34.in[h]=max(b3.inisiasi.S34[h,])
}
c3.S34.in
c3.S34=sum(c3.S34.in)/n.saham1
c3.S34

#D3
d3.inisiasi.S34=data.frame(a.r3tminr3*a.r4tminr4,a.r3tminr3*d.r4tminr4,
                           d.r3tminr3*a.r4tminr4,d.r3tminr3*d.r4tminr4)
d3.inisiasi.S34
```

```
d3.S34.in=vector()
for(h in 1:n.saham1){
  d3.S34.in[h]=max(d3.inisiasi.S34[h,])
}
d3.S34.in
d3.S34=sum(d3.S34.in)/n.saham1
d3.S34

#S34
S34=data.frame(a3.S34,b3.S34,c3.S34,d3.S34)
S34
S43=S34

#=====================================================
#MENCARI S35
#A3
a3.inisiasi.S35=data.frame(a.r3tminr3*a.r5tminr5,a.r3tminr3*d.r5tminr5,
                           d.r3tminr3*a.r5tminr5,d.r3tminr3*d.r5tminr5)
a3.inisiasi.S35

a3.S35.in=vector()
for(h in 1:n.saham1){
  a3.S35.in[h]=min(a3.inisiasi.S35[h,])
}
a3.S35.in
a3.S35=sum(a3.S35.in)/n.saham1
a3.S35
#B3
b3.inisiasi.S35=data.frame(b.r3tminr3*b.r5tminr5,b.r3tminr3*c.r5tminr5,
```

```
                    c.r3tminr3*b.r5tminr5,c.r3tminr3*c.r5tminr5)
b3.inisiasi.S35


b3.S35.in=vector()
for(h in 1:n.saham1){
  b3.S35.in[h]=min(b3.inisiasi.S35[h,])
}
b3.S35.in
b3.S35=sum(b3.S35.in)/n.saham1
b3.S35
#C3
c3.inisiasi.S35=data.frame(b.r3tminr3*b.r5tminr5,b.r3tminr3*c.r5tminr5,
                    c.r3tminr3*b.r5tminr5,c.r3tminr3*c.r5tminr5)
c3.inisiasi.S35


c3.S35.in=vector()
for(h in 1:n.saham1){
  c3.S35.in[h]=max(b3.inisiasi.S35[h,])
}
c3.S35.in
c3.S35=sum(c3.S35.in)/n.saham1
c3.S35


#D3
d3.inisiasi.S35=data.frame(a.r3tminr3*a.r5tminr5,a.r3tminr3*d.r5tminr5,
                    d.r3tminr3*a.r5tminr5,d.r3tminr3*d.r5tminr5)
d3.inisiasi.S35


d3.S35.in=vector()
```

```
for(h in 1:n.saham1){
  d3.S35.in[h]=max(d3.inisiasi.S35[h,])
}
d3.S35.in
d3.S35=sum(d3.S35.in)/n.saham1
d3.S35

#S35
S35=data.frame(a3.S35,b3.S35,c3.S35,d3.S35)
S35
S53=S35

#=====================================================
#MENCARI S36
#A3
a3.inisiasi.S36=data.frame(a.r3tminr3*a.r6tminr6,a.r3tminr3*d.r6tminr6,
                           d.r3tminr3*a.r6tminr6,d.r3tminr3*d.r6tminr6)
a3.inisiasi.S36

a3.S36.in=vector()
for(h in 1:n.saham1){
  a3.S36.in[h]=min(a3.inisiasi.S36[h,])
}
a3.S36.in
a3.S36=sum(a3.S36.in)/n.saham1
a3.S36
#B3
b3.inisiasi.S36=data.frame(b.r3tminr3*b.r6tminr6,b.r3tminr3*c.r6tminr6,
                           c.r3tminr3*b.r6tminr6,c.r3tminr3*c.r6tminr6)
```

```
b3.inisiasi.S36


b3.S36.in=vector()
for(h in 1:n.saham1){
  b3.S36.in[h]=min(b3.inisiasi.S36[h,])
}
b3.S36.in
b3.S36=sum(b3.S36.in)/n.saham1
b3.S36
#C3
c3.inisiasi.S36=data.frame(b.r3tminr3*b.r6tminr6,b.r3tminr3*c.r6tminr6,
                           c.r3tminr3*b.r6tminr6,c.r3tminr3*c.r6tminr6)
c3.inisiasi.S36


c3.S36.in=vector()
for(h in 1:n.saham1){
  c3.S36.in[h]=max(b3.inisiasi.S36[h,])
}
c3.S36.in
c3.S36=sum(c3.S36.in)/n.saham1
c3.S36


#D3
d3.inisiasi.S36=data.frame(a.r3tminr3*a.r6tminr6,a.r3tminr3*d.r6tminr6,
                           d.r3tminr3*a.r6tminr6,d.r3tminr3*d.r6tminr6)
d3.inisiasi.S36


d3.S36.in=vector()
for(h in 1:n.saham1){
```

```
  d3.S36.in[h]=max(d3.inisiasi.S36[h,])
}
d3.S36.in
d3.S36=sum(d3.S36.in)/n.saham1
d3.S36

#S36
S36=data.frame(a3.S36,b3.S36,c3.S36,d3.S36)
S36
S63=S36

#=====================================================
#MENCARI S37
#A3
a3.inisiasi.S37=data.frame(a.r3tminr3*a.r7tminr7,a.r3tminr3*d.r7tminr7,
                           d.r3tminr3*a.r7tminr7,d.r3tminr3*d.r7tminr7)
a3.inisiasi.S37

a3.S37.in=vector()
for(h in 1:n.saham1){
  a3.S37.in[h]=min(a3.inisiasi.S37[h,])
}
a3.S37.in
a3.S37=sum(a3.S37.in)/n.saham1
a3.S37
#B3
b3.inisiasi.S37=data.frame(b.r3tminr3*b.r7tminr7,b.r3tminr3*c.r7tminr7,
                           c.r3tminr3*b.r7tminr7,c.r3tminr3*c.r7tminr7)
b3.inisiasi.S37
```

```
b3.S37.in=vector()
for(h in 1:n.saham1){
  b3.S37.in[h]=min(b3.inisiasi.S37[h,])
}
b3.S37.in
b3.S37=sum(b3.S37.in)/n.saham1
b3.S37
#C3
c3.inisiasi.S37=data.frame(b.r3tminr3*b.r7tminr7,b.r3tminr3*c.r7tminr7,
                           c.r3tminr3*b.r7tminr7,c.r3tminr3*c.r7tminr7)
c3.inisiasi.S37

c3.S37.in=vector()
for(h in 1:n.saham1){
  c3.S37.in[h]=max(b3.inisiasi.S37[h,])
}
c3.S37.in
c3.S37=sum(c3.S37.in)/n.saham1
c3.S37

#D3
d3.inisiasi.S37=data.frame(a.r3tminr3*a.r7tminr7,a.r3tminr3*d.r7tminr7,
                           d.r3tminr3*a.r7tminr7,d.r3tminr3*d.r7tminr7)
d3.inisiasi.S37

d3.S37.in=vector()
for(h in 1:n.saham1){
  d3.S37.in[h]=max(d3.inisiasi.S37[h,])
```

```
}
d3.S37.in
d3.S37=sum(d3.S37.in)/n.saham1
d3.S37

#S37
S37=data.frame(a3.S37,b3.S37,c3.S37,d3.S37)
S37
S73=S37

#=====================================================
#MENCARI S38
#A3
a3.inisiasi.S38=data.frame(a.r3tminr3*a.r8tminr8,a.r3tminr3*d.r8tminr8,
                           d.r3tminr3*a.r8tminr8,d.r3tminr3*d.r8tminr8)
a3.inisiasi.S38

a3.S38.in=vector()
for(h in 1:n.saham1){
  a3.S38.in[h]=min(a3.inisiasi.S38[h,])
}
a3.S38.in
a3.S38=sum(a3.S38.in)/n.saham1
a3.S38
#B3
b3.inisiasi.S38=data.frame(b.r3tminr3*b.r8tminr8,b.r3tminr3*c.r8tminr8,
                           c.r3tminr3*b.r8tminr8,c.r3tminr3*c.r8tminr8)
b3.inisiasi.S38
```

```
b3.S38.in=vector()
for(h in 1:n.saham1){
  b3.S38.in[h]=min(b3.inisiasi.S38[h,])
}
b3.S38.in
b3.S38=sum(b3.S38.in)/n.saham1
b3.S38
#C3
c3.inisiasi.S38=data.frame(b.r3tminr3*b.r8tminr8,b.r3tminr3*c.r8tminr8,
                           c.r3tminr3*b.r8tminr8,c.r3tminr3*c.r8tminr8)
c3.inisiasi.S38

c3.S38.in=vector()
for(h in 1:n.saham1){
  c3.S38.in[h]=max(b3.inisiasi.S38[h,])
}
c3.S38.in
c3.S38=sum(c3.S38.in)/n.saham1
c3.S38

#D3
d3.inisiasi.S38=data.frame(a.r3tminr3*a.r8tminr8,a.r3tminr3*d.r8tminr8,
                           d.r3tminr3*a.r8tminr8,d.r3tminr3*d.r8tminr8)
d3.inisiasi.S38

d3.S38.in=vector()
for(h in 1:n.saham1){
  d3.S38.in[h]=max(d3.inisiasi.S38[h,])
}
```

```
d3.S38.in
d3.S38=sum(d3.S38.in)/n.saham1
d3.S38

#S38
S38=data.frame(a3.S38,b3.S38,c3.S38,d3.S38)
S38
S83=S38

#=====================================================
#MENCARI S39
#A3
a3.inisiasi.S39=data.frame(a.r3tminr3*a.r9tminr9,a.r3tminr3*d.r9tminr9,
                           d.r3tminr3*a.r9tminr9,d.r3tminr3*d.r9tminr9)
a3.inisiasi.S39

a3.S39.in=vector()
for(h in 1:n.saham1){
  a3.S39.in[h]=min(a3.inisiasi.S39[h,])
}
a3.S39.in
a3.S39=sum(a3.S39.in)/n.saham1
a3.S39
#B3
b3.inisiasi.S39=data.frame(b.r3tminr3*b.r9tminr9,b.r3tminr3*c.r9tminr9,
                           c.r3tminr3*b.r9tminr9,c.r3tminr3*c.r9tminr9)
b3.inisiasi.S39

b3.S39.in=vector()
```

```
for(h in 1:n.saham1){
  b3.S39.in[h]=min(b3.inisiasi.S39[h,])
}
b3.S39.in
b3.S39=sum(b3.S39.in)/n.saham1
b3.S39
#C3
c3.inisiasi.S39=data.frame(b.r3tminr3*b.r9tminr9,b.r3tminr3*c.r9tminr9,
                           c.r3tminr3*b.r9tminr9,c.r3tminr3*c.r9tminr9)
c3.inisiasi.S39

c3.S39.in=vector()
for(h in 1:n.saham1){
  c3.S39.in[h]=max(b3.inisiasi.S39[h,])
}
c3.S39.in
c3.S39=sum(c3.S39.in)/n.saham1
c3.S39

#D3
d3.inisiasi.S39=data.frame(a.r3tminr3*a.r9tminr9,a.r3tminr3*d.r9tminr9,
                           d.r3tminr3*a.r9tminr9,d.r3tminr3*d.r9tminr9)
d3.inisiasi.S39

d3.S39.in=vector()
for(h in 1:n.saham1){
  d3.S39.in[h]=max(d3.inisiasi.S39[h,])
}
d3.S39.in
```

```
d3.S39=sum(d3.S39.in)/n.saham1
d3.S39

#S39
S39=data.frame(a3.S39,b3.S39,c3.S39,d3.S39)
S39
S93=S39

#=====================================================
#MENCARI S310
#A3
a3.inisiasi.S310=data.frame(a.r3tminr3*a.r10tminr10,a.r3tminr3*d.r10tminr10,
                            d.r3tminr3*a.r10tminr10,d.r3tminr3*d.r10tminr10)
a3.inisiasi.S310

a3.S310.in=vector()
for(h in 1:n.saham1){
  a3.S310.in[h]=min(a3.inisiasi.S310[h,])
}
a3.S310.in
a3.S310=sum(a3.S310.in)/n.saham1
a3.S310
#B3
b3.inisiasi.S310=data.frame(b.r3tminr3*b.r10tminr10,b.r3tminr3*c.r10tminr10,
                            c.r3tminr3*b.r10tminr10,c.r3tminr3*c.r10tminr10)
b3.inisiasi.S310

b3.S310.in=vector()
for(h in 1:n.saham1){
```

```
  b3.S310.in[h]=min(b3.inisiasi.S310[h,])
}
b3.S310.in
b3.S310=sum(b3.S310.in)/n.saham1
b3.S310
#C3
c3.inisiasi.S310=data.frame(b.r3tminr3*b.r10tminr10,b.r3tminr3*c.r10tminr10,
                    c.r3tminr3*b.r10tminr10,c.r3tminr3*c.r10tminr10)
c3.inisiasi.S310

c3.S310.in=vector()
for(h in 1:n.saham1){
  c3.S310.in[h]=max(b3.inisiasi.S310[h,])
}
c3.S310.in
c3.S310=sum(c3.S310.in)/n.saham1
c3.S310

#D3
d3.inisiasi.S310=data.frame(a.r3tminr3*a.r10tminr10,a.r3tminr3*d.r10tminr10,
                    d.r3tminr3*a.r10tminr10,d.r3tminr3*d.r10tminr10)
d3.inisiasi.S310

d3.S310.in=vector()
for(h in 1:n.saham1){
  d3.S310.in[h]=max(d3.inisiasi.S310[h,])
}
d3.S310.in
d3.S310=sum(d3.S310.in)/n.saham1
```

```
d3.S310


#S310
S310=data.frame(a3.S310,b3.S310,c3.S310,d3.S310)
S310
S103=S310




#=====================================================
#MENCARI S44
#A3
a3.inisiasi.S44=data.frame(a.r4tminr4*a.r4tminr4,a.r4tminr4*d.r4tminr4,
                           d.r4tminr4*a.r4tminr4,d.r4tminr4*d.r4tminr4)
a3.inisiasi.S44

a3.S44.in=vector()
for(h in 1:n.saham1){
  a3.S44.in[h]=min(a3.inisiasi.S44[h,])
}
a3.S44.in
a3.S44=sum(a3.S44.in)/n.saham1
a3.S44
#B3
b3.inisiasi.S44=data.frame(b.r4tminr4*b.r4tminr4,b.r4tminr4*c.r4tminr4,
                           c.r4tminr4*b.r4tminr4,c.r4tminr4*c.r4tminr4)
b3.inisiasi.S44

b3.S44.in=vector()
```

```
for(h in 1:n.saham1){
  b3.S44.in[h]=min(b3.inisiasi.S44[h,])
}
b3.S44.in
b3.S44=sum(b3.S44.in)/n.saham1
b3.S44
#C3
c3.inisiasi.S44=data.frame(b.r4tminr4*b.r4tminr4,b.r4tminr4*c.r4tminr4,
                           c.r4tminr4*b.r4tminr4,c.r4tminr4*c.r4tminr4)
c3.inisiasi.S44

c3.S44.in=vector()
for(h in 1:n.saham1){
  c3.S44.in[h]=max(b3.inisiasi.S44[h,])
}
c3.S44.in
c3.S44=sum(c3.S44.in)/n.saham1
c3.S44

#D3
d3.inisiasi.S44=data.frame(a.r4tminr4*a.r4tminr4,a.r4tminr4*d.r4tminr4,
                           d.r4tminr4*a.r4tminr4,d.r4tminr4*d.r4tminr4)
d3.inisiasi.S44

d3.S44.in=vector()
for(h in 1:n.saham1){
  d3.S44.in[h]=max(d3.inisiasi.S44[h,])
}
d3.S44.in
```

```
d3.S44=sum(d3.S44.in)/n.saham1
d3.S44

#S44
S44=data.frame(a3.S44,b3.S44,c3.S44,d3.S44)
S44
S44=S44



#=====================================================
#MENCARI S45
#A3
a3.inisiasi.S45=data.frame(a.r4tminr4*a.r5tminr5,a.r4tminr4*d.r5tminr5,
                           d.r4tminr4*a.r5tminr5,d.r4tminr4*d.r5tminr5)
a3.inisiasi.S45

a3.S45.in=vector()
for(h in 1:n.saham1){
  a3.S45.in[h]=min(a3.inisiasi.S45[h,])
}
a3.S45.in
a3.S45=sum(a3.S45.in)/n.saham1
a3.S45
#B3
b3.inisiasi.S45=data.frame(b.r4tminr4*b.r5tminr5,b.r4tminr4*c.r5tminr5,
                           c.r4tminr4*b.r5tminr5,c.r4tminr4*c.r5tminr5)
b3.inisiasi.S45

b3.S45.in=vector()
```

```
for(h in 1:n.saham1){
  b3.S45.in[h]=min(b3.inisiasi.S45[h,])
}
b3.S45.in
b3.S45=sum(b3.S45.in)/n.saham1
b3.S45
#C3
c3.inisiasi.S45=data.frame(b.r4tminr4*b.r5tminr5,b.r4tminr4*c.r5tminr5,
                           c.r4tminr4*b.r5tminr5,c.r4tminr4*c.r5tminr5)
c3.inisiasi.S45

c3.S45.in=vector()
for(h in 1:n.saham1){
  c3.S45.in[h]=max(b3.inisiasi.S45[h,])
}
c3.S45.in
c3.S45=sum(c3.S45.in)/n.saham1
c3.S45

#D3
d3.inisiasi.S45=data.frame(a.r4tminr4*a.r5tminr5,a.r4tminr4*d.r5tminr5,
                           d.r4tminr4*a.r5tminr5,d.r4tminr4*d.r5tminr5)
d3.inisiasi.S45

d3.S45.in=vector()
for(h in 1:n.saham1){
  d3.S45.in[h]=max(d3.inisiasi.S45[h,])
}
d3.S45.in
```

```
d3.S45=sum(d3.S45.in)/n.saham1
d3.S45

#S45
S45=data.frame(a3.S45,b3.S45,c3.S45,d3.S45)
S45
S54=S45

#=====================================================
#MENCARI S46
#A3
a3.inisiasi.S46=data.frame(a.r4tminr4*a.r6tminr6,a.r4tminr4*d.r6tminr6,
                           d.r4tminr4*a.r6tminr6,d.r4tminr4*d.r6tminr6)
a3.inisiasi.S46

a3.S46.in=vector()
for(h in 1:n.saham1){
  a3.S46.in[h]=min(a3.inisiasi.S46[h,])
}
a3.S46.in
a3.S46=sum(a3.S46.in)/n.saham1
a3.S46
#B3
b3.inisiasi.S46=data.frame(b.r4tminr4*b.r6tminr6,b.r4tminr4*c.r6tminr6,
                           c.r4tminr4*b.r6tminr6,c.r4tminr4*c.r6tminr6)
b3.inisiasi.S46

b3.S46.in=vector()
for(h in 1:n.saham1){
```

```
  b3.S46.in[h]=min(b3.inisiasi.S46[h,])
}
b3.S46.in
b3.S46=sum(b3.S46.in)/n.saham1
b3.S46
#C3
c3.inisiasi.S46=data.frame(b.r4tminr4*b.r6tminr6,b.r4tminr4*c.r6tminr6,
                           c.r4tminr4*b.r6tminr6,c.r4tminr4*c.r6tminr6)
c3.inisiasi.S46

c3.S46.in=vector()
for(h in 1:n.saham1){
  c3.S46.in[h]=max(b3.inisiasi.S46[h,])
}
c3.S46.in
c3.S46=sum(c3.S46.in)/n.saham1
c3.S46

#D3
d3.inisiasi.S46=data.frame(a.r4tminr4*a.r6tminr6,a.r4tminr4*d.r6tminr6,
                           d.r4tminr4*a.r6tminr6,d.r4tminr4*d.r6tminr6)
d3.inisiasi.S46

d3.S46.in=vector()
for(h in 1:n.saham1){
  d3.S46.in[h]=max(d3.inisiasi.S46[h,])
}
d3.S46.in
d3.S46=sum(d3.S46.in)/n.saham1
```

```
d3.S46

#S46
S46=data.frame(a3.S46,b3.S46,c3.S46,d3.S46)
S46
S64=S46


#=====================================================
#MENCARI S47
#A3
a3.inisiasi.S47=data.frame(a.r4tminr4*a.r7tminr7,a.r4tminr4*d.r7tminr7,
                           d.r4tminr4*a.r7tminr7,d.r4tminr4*d.r7tminr7)
a3.inisiasi.S47

a3.S47.in=vector()
for(h in 1:n.saham1){
  a3.S47.in[h]=min(a3.inisiasi.S47[h,])
}
a3.S47.in
a3.S47=sum(a3.S47.in)/n.saham1
a3.S47
#B3
b3.inisiasi.S47=data.frame(b.r4tminr4*b.r7tminr7,b.r4tminr4*c.r7tminr7,
                           c.r4tminr4*b.r7tminr7,c.r4tminr4*c.r7tminr7)
b3.inisiasi.S47

b3.S47.in=vector()
for(h in 1:n.saham1){
```

```
  b3.S47.in[h]=min(b3.inisiasi.S47[h,])
}
b3.S47.in
b3.S47=sum(b3.S47.in)/n.saham1
b3.S47
#C3
c3.inisiasi.S47=data.frame(b.r4tminr4*b.r7tminr7,b.r4tminr4*c.r7tminr7,
                           c.r4tminr4*b.r7tminr7,c.r4tminr4*c.r7tminr7)
c3.inisiasi.S47

c3.S47.in=vector()
for(h in 1:n.saham1){
  c3.S47.in[h]=max(b3.inisiasi.S47[h,])
}
c3.S47.in
c3.S47=sum(c3.S47.in)/n.saham1
c3.S47

#D3
d3.inisiasi.S47=data.frame(a.r4tminr4*a.r7tminr7,a.r4tminr4*d.r7tminr7,
                           d.r4tminr4*a.r7tminr7,d.r4tminr4*d.r7tminr7)
d3.inisiasi.S47

d3.S47.in=vector()
for(h in 1:n.saham1){
  d3.S47.in[h]=max(d3.inisiasi.S47[h,])
}
d3.S47.in
d3.S47=sum(d3.S47.in)/n.saham1
```

```
d3.S47


#S47
S47=data.frame(a3.S47,b3.S47,c3.S47,d3.S47)
S47
S74=S47

#=====================================================
#MENCARI S48
#A3
a3.inisiasi.S48=data.frame(a.r4tminr4*a.r8tminr8,a.r4tminr4*d.r8tminr8,
                           d.r4tminr4*a.r8tminr8,d.r4tminr4*d.r8tminr8)
a3.inisiasi.S48

a3.S48.in=vector()
for(h in 1:n.saham1){
  a3.S48.in[h]=min(a3.inisiasi.S48[h,])
}
a3.S48.in
a3.S48=sum(a3.S48.in)/n.saham1
a3.S48
#B3
b3.inisiasi.S48=data.frame(b.r4tminr4*b.r8tminr8,b.r4tminr4*c.r8tminr8,
                           c.r4tminr4*b.r8tminr8,c.r4tminr4*c.r8tminr8)
b3.inisiasi.S48

b3.S48.in=vector()
for(h in 1:n.saham1){
  b3.S48.in[h]=min(b3.inisiasi.S48[h,])
```

```
}
b3.S48.in
b3.S48=sum(b3.S48.in)/n.saham1
b3.S48
#C3
c3.inisiasi.S48=data.frame(b.r4tminr4*b.r8tminr8,b.r4tminr4*c.r8tminr8,
                           c.r4tminr4*b.r8tminr8,c.r4tminr4*c.r8tminr8)
c3.inisiasi.S48

c3.S48.in=vector()
for(h in 1:n.saham1){
  c3.S48.in[h]=max(b3.inisiasi.S48[h,])
}
c3.S48.in
c3.S48=sum(c3.S48.in)/n.saham1
c3.S48

#D3
d3.inisiasi.S48=data.frame(a.r4tminr4*a.r8tminr8,a.r4tminr4*d.r8tminr8,
                           d.r4tminr4*a.r8tminr8,d.r4tminr4*d.r8tminr8)
d3.inisiasi.S48

d3.S48.in=vector()
for(h in 1:n.saham1){
  d3.S48.in[h]=max(d3.inisiasi.S48[h,])
}
d3.S48.in
d3.S48=sum(d3.S48.in)/n.saham1
d3.S48
```

```
#S48
S48=data.frame(a3.S48,b3.S48,c3.S48,d3.S48)
S48
S84=S48

#=====================================================
#MENCARI S49
#A3
a3.inisiasi.S49=data.frame(a.r4tminr4*a.r9tminr9,a.r4tminr4*d.r9tminr9,
                           d.r4tminr4*a.r9tminr9,d.r4tminr4*d.r9tminr9)
a3.inisiasi.S49

a3.S49.in=vector()
for(h in 1:n.saham1){
  a3.S49.in[h]=min(a3.inisiasi.S49[h,])
}
a3.S49.in
a3.S49=sum(a3.S49.in)/n.saham1
a3.S49
#B3
b3.inisiasi.S49=data.frame(b.r4tminr4*b.r9tminr9,b.r4tminr4*c.r9tminr9,
                           c.r4tminr4*b.r9tminr9,c.r4tminr4*c.r9tminr9)
b3.inisiasi.S49

b3.S49.in=vector()
for(h in 1:n.saham1){
  b3.S49.in[h]=min(b3.inisiasi.S49[h,])
}
```

```
b3.S49.in
b3.S49=sum(b3.S49.in)/n.saham1
b3.S49
#C3
c3.inisiasi.S49=data.frame(b.r4tminr4*b.r9tminr9,b.r4tminr4*c.r9tminr9,
                           c.r4tminr4*b.r9tminr9,c.r4tminr4*c.r9tminr9)
c3.inisiasi.S49

c3.S49.in=vector()
for(h in 1:n.saham1){
  c3.S49.in[h]=max(b3.inisiasi.S49[h,])
}
c3.S49.in
c3.S49=sum(c3.S49.in)/n.saham1
c3.S49

#D3
d3.inisiasi.S49=data.frame(a.r4tminr4*a.r9tminr9,a.r4tminr4*d.r9tminr9,
                           d.r4tminr4*a.r9tminr9,d.r4tminr4*d.r9tminr9)
d3.inisiasi.S49

d3.S49.in=vector()
for(h in 1:n.saham1){
  d3.S49.in[h]=max(d3.inisiasi.S49[h,])
}
d3.S49.in
d3.S49=sum(d3.S49.in)/n.saham1
d3.S49
```

```
#S49
S49=data.frame(a3.S49,b3.S49,c3.S49,d3.S49)
S49
S94=S49

#=====================================================
#MENCARI S410
#A3
a3.inisiasi.S410=data.frame(a.r4tminr4*a.r10tminr10,a.r4tminr4*d.r10tminr10,
                            d.r4tminr4*a.r10tminr10,d.r4tminr4*d.r10tminr10)
a3.inisiasi.S410

a3.S410.in=vector()
for(h in 1:n.saham1){
  a3.S410.in[h]=min(a3.inisiasi.S410[h,])
}
a3.S410.in
a3.S410=sum(a3.S410.in)/n.saham1
a3.S410
#B3
b3.inisiasi.S410=data.frame(b.r4tminr4*b.r10tminr10,b.r4tminr4*c.r10tminr10,
                            c.r4tminr4*b.r10tminr10,c.r4tminr4*c.r10tminr10)
b3.inisiasi.S410

b3.S410.in=vector()
for(h in 1:n.saham1){
  b3.S410.in[h]=min(b3.inisiasi.S410[h,])
}
b3.S410.in
```

```
b3.S410=sum(b3.S410.in)/n.saham1
b3.S410
#C3
c3.inisiasi.S410=data.frame(b.r4tminr4*b.r10tminr10,b.r4tminr4*c.r10tminr10,
                           c.r4tminr4*b.r10tminr10,c.r4tminr4*c.r10tminr10)
c3.inisiasi.S410

c3.S410.in=vector()
for(h in 1:n.saham1){
  c3.S410.in[h]=max(b3.inisiasi.S410[h,])
}
c3.S410.in
c3.S410=sum(c3.S410.in)/n.saham1
c3.S410

#D3
d3.inisiasi.S410=data.frame(a.r4tminr4*a.r10tminr10,a.r4tminr4*d.r10tminr10,
                           d.r4tminr4*a.r10tminr10,d.r4tminr4*d.r10tminr10)
d3.inisiasi.S410

d3.S410.in=vector()
for(h in 1:n.saham1){
  d3.S410.in[h]=max(d3.inisiasi.S410[h,])
}
d3.S410.in
d3.S410=sum(d3.S410.in)/n.saham1
d3.S410

#S410
```

```
S410=data.frame(a3.S410,b3.S410,c3.S410,d3.S410)
S410
S104=S410

#=====================================================
#MENCARI S55
#A3
a3.inisiasi.S55=data.frame(a.r5tminr5*a.r5tminr5,a.r5tminr5*d.r5tminr5,
                           d.r5tminr5*a.r5tminr5,d.r5tminr5*d.r5tminr5)
a3.inisiasi.S55

a3.S55.in=vector()
for(h in 1:n.saham1){
  a3.S55.in[h]=min(a3.inisiasi.S55[h,])
}
a3.S55.in
a3.S55=sum(a3.S55.in)/n.saham1
a3.S55
#B3
b3.inisiasi.S55=data.frame(b.r5tminr5*b.r5tminr5,b.r5tminr5*c.r5tminr5,
                           c.r5tminr5*b.r5tminr5,c.r5tminr5*c.r5tminr5)
b3.inisiasi.S55

b3.S55.in=vector()
for(h in 1:n.saham1){
  b3.S55.in[h]=min(b3.inisiasi.S55[h,])
}
b3.S55.in
b3.S55=sum(b3.S55.in)/n.saham1
```

```
b3.S55
#C3
c3.inisiasi.S55=data.frame(b.r5tminr5*b.r5tminr5,b.r5tminr5*c.r5tminr5,
                           c.r5tminr5*b.r5tminr5,c.r5tminr5*c.r5tminr5)
c3.inisiasi.S55

c3.S55.in=vector()
for(h in 1:n.saham1){
  c3.S55.in[h]=max(b3.inisiasi.S55[h,])
}
c3.S55.in
c3.S55=sum(c3.S55.in)/n.saham1
c3.S55

#D3
d3.inisiasi.S55=data.frame(a.r5tminr5*a.r5tminr5,a.r5tminr5*d.r5tminr5,
                           d.r5tminr5*a.r5tminr5,d.r5tminr5*d.r5tminr5)
d3.inisiasi.S55

d3.S55.in=vector()
for(h in 1:n.saham1){
  d3.S55.in[h]=max(d3.inisiasi.S55[h,])
}
d3.S55.in
d3.S55=sum(d3.S55.in)/n.saham1
d3.S55

#S55
S55=data.frame(a3.S55,b3.S55,c3.S55,d3.S55)
```

```
S55
S55=S55

#====================================================
#MENCARI S56
#A3
a3.inisiasi.S56=data.frame(a.r5tminr5*a.r6tminr6,a.r5tminr5*d.r6tminr6,
                           d.r5tminr5*a.r6tminr6,d.r5tminr5*d.r6tminr6)
a3.inisiasi.S56

a3.S56.in=vector()
for(h in 1:n.saham1){
  a3.S56.in[h]=min(a3.inisiasi.S56[h,])
}
a3.S56.in
a3.S56=sum(a3.S56.in)/n.saham1
a3.S56
#B3
b3.inisiasi.S56=data.frame(b.r5tminr5*b.r6tminr6,b.r5tminr5*c.r6tminr6,
                           c.r5tminr5*b.r6tminr6,c.r5tminr5*c.r6tminr6)
b3.inisiasi.S56

b3.S56.in=vector()
for(h in 1:n.saham1){
  b3.S56.in[h]=min(b3.inisiasi.S56[h,])
}
b3.S56.in
b3.S56=sum(b3.S56.in)/n.saham1
b3.S56
```

```
#C3
c3.inisiasi.S56=data.frame(b.r5tminr5*b.r6tminr6,b.r5tminr5*c.r6tminr6,
                           c.r5tminr5*b.r6tminr6,c.r5tminr5*c.r6tminr6)
c3.inisiasi.S56

c3.S56.in=vector()
for(h in 1:n.saham1){
  c3.S56.in[h]=max(b3.inisiasi.S56[h,])
}
c3.S56.in
c3.S56=sum(c3.S56.in)/n.saham1
c3.S56

#D3
d3.inisiasi.S56=data.frame(a.r5tminr5*a.r6tminr6,a.r5tminr5*d.r6tminr6,
                           d.r5tminr5*a.r6tminr6,d.r5tminr5*d.r6tminr6)
d3.inisiasi.S56

d3.S56.in=vector()
for(h in 1:n.saham1){
  d3.S56.in[h]=max(d3.inisiasi.S56[h,])
}
d3.S56.in
d3.S56=sum(d3.S56.in)/n.saham1
d3.S56

#S56
S56=data.frame(a3.S56,b3.S56,c3.S56,d3.S56)
S56
```

```
S65=S56



#=====================================================
#MENCARI S57
#A3
a3.inisiasi.S57=data.frame(a.r5tminr5*a.r7tminr7,a.r5tminr5*d.r7tminr7,
                           d.r5tminr5*a.r7tminr7,d.r5tminr5*d.r7tminr7)
a3.inisiasi.S57

a3.S57.in=vector()
for(h in 1:n.saham1){
  a3.S57.in[h]=min(a3.inisiasi.S57[h,])
}
a3.S57.in
a3.S57=sum(a3.S57.in)/n.saham1
a3.S57
#B3
b3.inisiasi.S57=data.frame(b.r5tminr5*b.r7tminr7,b.r5tminr5*c.r7tminr7,
                           c.r5tminr5*b.r7tminr7,c.r5tminr5*c.r7tminr7)
b3.inisiasi.S57

b3.S57.in=vector()
for(h in 1:n.saham1){
  b3.S57.in[h]=min(b3.inisiasi.S57[h,])
}
b3.S57.in
b3.S57=sum(b3.S57.in)/n.saham1
b3.S57
```

```
#C3
c3.inisiasi.S57=data.frame(b.r5tminr5*b.r7tminr7,b.r5tminr5*c.r7tminr7,
                           c.r5tminr5*b.r7tminr7,c.r5tminr5*c.r7tminr7)
c3.inisiasi.S57

c3.S57.in=vector()
for(h in 1:n.saham1){
  c3.S57.in[h]=max(b3.inisiasi.S57[h,])
}
c3.S57.in
c3.S57=sum(c3.S57.in)/n.saham1
c3.S57

#D3
d3.inisiasi.S57=data.frame(a.r5tminr5*a.r7tminr7,a.r5tminr5*d.r7tminr7,
                           d.r5tminr5*a.r7tminr7,d.r5tminr5*d.r7tminr7)
d3.inisiasi.S57

d3.S57.in=vector()
for(h in 1:n.saham1){
  d3.S57.in[h]=max(d3.inisiasi.S57[h,])
}
d3.S57.in
d3.S57=sum(d3.S57.in)/n.saham1
d3.S57

#S57
S57=data.frame(a3.S57,b3.S57,c3.S57,d3.S57)
S57
```

```
S75=S57


#=====================================================
#MENCARI S58
#A3
a3.inisiasi.S58=data.frame(a.r5tminr5*a.r8tminr8,a.r5tminr5*d.r8tminr8,
                           d.r5tminr5*a.r8tminr8,d.r5tminr5*d.r8tminr8)
a3.inisiasi.S58

a3.S58.in=vector()
for(h in 1:n.saham1){
  a3.S58.in[h]=min(a3.inisiasi.S58[h,])
}
a3.S58.in
a3.S58=sum(a3.S58.in)/n.saham1
a3.S58
#B3
b3.inisiasi.S58=data.frame(b.r5tminr5*b.r8tminr8,b.r5tminr5*c.r8tminr8,
                           c.r5tminr5*b.r8tminr8,c.r5tminr5*c.r8tminr8)
b3.inisiasi.S58

b3.S58.in=vector()
for(h in 1:n.saham1){
  b3.S58.in[h]=min(b3.inisiasi.S58[h,])
}
b3.S58.in
b3.S58=sum(b3.S58.in)/n.saham1
b3.S58
#C3
```

```
c3.inisiasi.S58=data.frame(b.r5tminr5*b.r8tminr8,b.r5tminr5*c.r8tminr8,
                           c.r5tminr5*b.r8tminr8,c.r5tminr5*c.r8tminr8)
c3.inisiasi.S58

c3.S58.in=vector()
for(h in 1:n.saham1){
  c3.S58.in[h]=max(b3.inisiasi.S58[h,])
}
c3.S58.in
c3.S58=sum(c3.S58.in)/n.saham1
c3.S58

#D3
d3.inisiasi.S58=data.frame(a.r5tminr5*a.r8tminr8,a.r5tminr5*d.r8tminr8,
                           d.r5tminr5*a.r8tminr8,d.r5tminr5*d.r8tminr8)
d3.inisiasi.S58

d3.S58.in=vector()
for(h in 1:n.saham1){
  d3.S58.in[h]=max(d3.inisiasi.S58[h,])
}
d3.S58.in
d3.S58=sum(d3.S58.in)/n.saham1
d3.S58

#S58
S58=data.frame(a3.S58,b3.S58,c3.S58,d3.S58)
S58
S85=S58
```

```
#=====================================================
#MENCARI S59
#A3
a3.inisiasi.S59=data.frame(a.r5tminr5*a.r9tminr9,a.r5tminr5*d.r9tminr9,
                           d.r5tminr5*a.r9tminr9,d.r5tminr5*d.r9tminr9)
a3.inisiasi.S59

a3.S59.in=vector()
for(h in 1:n.saham1){
  a3.S59.in[h]=min(a3.inisiasi.S59[h,])
}
a3.S59.in
a3.S59=sum(a3.S59.in)/n.saham1
a3.S59
#B3
b3.inisiasi.S59=data.frame(b.r5tminr5*b.r9tminr9,b.r5tminr5*c.r9tminr9,
                           c.r5tminr5*b.r9tminr9,c.r5tminr5*c.r9tminr9)
b3.inisiasi.S59

b3.S59.in=vector()
for(h in 1:n.saham1){
  b3.S59.in[h]=min(b3.inisiasi.S59[h,])
}
b3.S59.in
b3.S59=sum(b3.S59.in)/n.saham1
b3.S59
#C3
c3.inisiasi.S59=data.frame(b.r5tminr5*b.r9tminr9,b.r5tminr5*c.r9tminr9,
```

```
                    c.r5tminr5*b.r9tminr9,c.r5tminr5*c.r9tminr9)
c3.inisiasi.S59


c3.S59.in=vector()
for(h in 1:n.saham1){
  c3.S59.in[h]=max(b3.inisiasi.S59[h,])
}
c3.S59.in
c3.S59=sum(c3.S59.in)/n.saham1
c3.S59


#D3
d3.inisiasi.S59=data.frame(a.r5tminr5*a.r9tminr9,a.r5tminr5*d.r9tminr9,
                    d.r5tminr5*a.r9tminr9,d.r5tminr5*d.r9tminr9)
d3.inisiasi.S59


d3.S59.in=vector()
for(h in 1:n.saham1){
  d3.S59.in[h]=max(d3.inisiasi.S59[h,])
}
d3.S59.in
d3.S59=sum(d3.S59.in)/n.saham1
d3.S59


#S59
S59=data.frame(a3.S59,b3.S59,c3.S59,d3.S59)
S59
S95=S59
```

```
#=====================================================
#MENCARI S510
#A3
a3.inisiasi.S510=data.frame(a.r5tminr5*a.r10tminr10,a.r5tminr5*d.r10tminr10,
                            d.r5tminr5*a.r10tminr10,d.r5tminr5*d.r10tminr10)
a3.inisiasi.S510

a3.S510.in=vector()
for(h in 1:n.saham1){
  a3.S510.in[h]=min(a3.inisiasi.S510[h,])
}
a3.S510.in
a3.S510=sum(a3.S510.in)/n.saham1
a3.S510
#B3
b3.inisiasi.S510=data.frame(b.r5tminr5*b.r10tminr10,b.r5tminr5*c.r10tminr10,
                            c.r5tminr5*b.r10tminr10,c.r5tminr5*c.r10tminr10)
b3.inisiasi.S510

b3.S510.in=vector()
for(h in 1:n.saham1){
  b3.S510.in[h]=min(b3.inisiasi.S510[h,])
}
b3.S510.in
b3.S510=sum(b3.S510.in)/n.saham1
b3.S510
#C3
c3.inisiasi.S510=data.frame(b.r5tminr5*b.r10tminr10,b.r5tminr5*c.r10tminr10,
                            c.r5tminr5*b.r10tminr10,c.r5tminr5*c.r10tminr10)
```

```
c3.inisiasi.S510


c3.S510.in=vector()
for(h in 1:n.saham1){
  c3.S510.in[h]=max(b3.inisiasi.S510[h,])
}
c3.S510.in
c3.S510=sum(c3.S510.in)/n.saham1
c3.S510

#D3
d3.inisiasi.S510=data.frame(a.r5tminr5*a.r10tminr10,a.r5tminr5*d.r10tminr10,
                            d.r5tminr5*a.r10tminr10,d.r5tminr5*d.r10tminr10)
d3.inisiasi.S510

d3.S510.in=vector()
for(h in 1:n.saham1){
  d3.S510.in[h]=max(d3.inisiasi.S510[h,])
}
d3.S510.in
d3.S510=sum(d3.S510.in)/n.saham1
d3.S510

#S510
S510=data.frame(a3.S510,b3.S510,c3.S510,d3.S510)
S510
S105=S510
```

```
#=====================================================
#MENCARI S66
#A3
a3.inisiasi.S66=data.frame(a.r6tminr6*a.r6tminr6,a.r6tminr6*d.r6tminr6,
                           d.r6tminr6*a.r6tminr6,d.r6tminr6*d.r6tminr6)
a3.inisiasi.S66

a3.S66.in=vector()
for(h in 1:n.saham1){
  a3.S66.in[h]=min(a3.inisiasi.S66[h,])
}
a3.S66.in
a3.S66=sum(a3.S66.in)/n.saham1
a3.S66
#B3
b3.inisiasi.S66=data.frame(b.r6tminr6*b.r6tminr6,b.r6tminr6*c.r6tminr6,
                           c.r6tminr6*b.r6tminr6,c.r6tminr6*c.r6tminr6)
b3.inisiasi.S66

b3.S66.in=vector()
for(h in 1:n.saham1){
  b3.S66.in[h]=min(b3.inisiasi.S66[h,])
}
b3.S66.in
b3.S66=sum(b3.S66.in)/n.saham1
b3.S66
#C3
c3.inisiasi.S66=data.frame(b.r6tminr6*b.r6tminr6,b.r6tminr6*c.r6tminr6,
                           c.r6tminr6*b.r6tminr6,c.r6tminr6*c.r6tminr6)
```

```
c3.inisiasi.S66


c3.S66.in=vector()
for(h in 1:n.saham1){
  c3.S66.in[h]=max(b3.inisiasi.S66[h,])
}
c3.S66.in
c3.S66=sum(c3.S66.in)/n.saham1
c3.S66

#D3
d3.inisiasi.S66=data.frame(a.r6tminr6*a.r6tminr6,a.r6tminr6*d.r6tminr6,
                           d.r6tminr6*a.r6tminr6,d.r6tminr6*d.r6tminr6)
d3.inisiasi.S66


d3.S66.in=vector()
for(h in 1:n.saham1){
  d3.S66.in[h]=max(d3.inisiasi.S66[h,])
}
d3.S66.in
d3.S66=sum(d3.S66.in)/n.saham1
d3.S66

#S66
S66=data.frame(a3.S66,b3.S66,c3.S66,d3.S66)
S66
S66=S66
```

```
#====================================================
#MENCARI S67
#A3
a3.inisiasi.S67=data.frame(a.r6tminr6*a.r7tminr7,a.r6tminr6*d.r7tminr7,
                           d.r6tminr6*a.r7tminr7,d.r6tminr6*d.r7tminr7)
a3.inisiasi.S67

a3.S67.in=vector()
for(h in 1:n.saham1){
  a3.S67.in[h]=min(a3.inisiasi.S67[h,])
}
a3.S67.in
a3.S67=sum(a3.S67.in)/n.saham1
a3.S67
#B3
b3.inisiasi.S67=data.frame(b.r6tminr6*b.r7tminr7,b.r6tminr6*c.r7tminr7,
                           c.r6tminr6*b.r7tminr7,c.r6tminr6*c.r7tminr7)
b3.inisiasi.S67

b3.S67.in=vector()
for(h in 1:n.saham1){
  b3.S67.in[h]=min(b3.inisiasi.S67[h,])
}
b3.S67.in
b3.S67=sum(b3.S67.in)/n.saham1
b3.S67
#C3
c3.inisiasi.S67=data.frame(b.r6tminr6*b.r7tminr7,b.r6tminr6*c.r7tminr7,
                           c.r6tminr6*b.r7tminr7,c.r6tminr6*c.r7tminr7)
```

```
c3.inisiasi.S67


c3.S67.in=vector()
for(h in 1:n.saham1){
  c3.S67.in[h]=max(b3.inisiasi.S67[h,])
}
c3.S67.in
c3.S67=sum(c3.S67.in)/n.saham1
c3.S67


#D3
d3.inisiasi.S67=data.frame(a.r6tminr6*a.r7tminr7,a.r6tminr6*d.r7tminr7,
                           d.r6tminr6*a.r7tminr7,d.r6tminr6*d.r7tminr7)
d3.inisiasi.S67


d3.S67.in=vector()
for(h in 1:n.saham1){
  d3.S67.in[h]=max(d3.inisiasi.S67[h,])
}
d3.S67.in
d3.S67=sum(d3.S67.in)/n.saham1
d3.S67


#S67
S67=data.frame(a3.S67,b3.S67,c3.S67,d3.S67)
S67
S76=S67
```

```
#====================================================
#MENCARI S68
#A3
a3.inisiasi.S68=data.frame(a.r6tminr6*a.r8tminr8,a.r6tminr6*d.r8tminr8,
                           d.r6tminr6*a.r8tminr8,d.r6tminr6*d.r8tminr8)
a3.inisiasi.S68

a3.S68.in=vector()
for(h in 1:n.saham1){
  a3.S68.in[h]=min(a3.inisiasi.S68[h,])
}
a3.S68.in
a3.S68=sum(a3.S68.in)/n.saham1
a3.S68
#B3
b3.inisiasi.S68=data.frame(b.r6tminr6*b.r8tminr8,b.r6tminr6*c.r8tminr8,
                           c.r6tminr6*b.r8tminr8,c.r6tminr6*c.r8tminr8)
b3.inisiasi.S68

b3.S68.in=vector()
for(h in 1:n.saham1){
  b3.S68.in[h]=min(b3.inisiasi.S68[h,])
}
b3.S68.in
b3.S68=sum(b3.S68.in)/n.saham1
b3.S68
#C3
c3.inisiasi.S68=data.frame(b.r6tminr6*b.r8tminr8,b.r6tminr6*c.r8tminr8,
                           c.r6tminr6*b.r8tminr8,c.r6tminr6*c.r8tminr8)
```

```
c3.inisiasi.S68

c3.S68.in=vector()
for(h in 1:n.saham1){
  c3.S68.in[h]=max(b3.inisiasi.S68[h,])
}
c3.S68.in
c3.S68=sum(c3.S68.in)/n.saham1
c3.S68

#D3
d3.inisiasi.S68=data.frame(a.r6tminr6*a.r8tminr8,a.r6tminr6*d.r8tminr8,
                           d.r6tminr6*a.r8tminr8,d.r6tminr6*d.r8tminr8)
d3.inisiasi.S68

d3.S68.in=vector()
for(h in 1:n.saham1){
  d3.S68.in[h]=max(d3.inisiasi.S68[h,])
}
d3.S68.in
d3.S68=sum(d3.S68.in)/n.saham1
d3.S68

#S68
S68=data.frame(a3.S68,b3.S68,c3.S68,d3.S68)
S68
S86=S68

#=====================================================
```

```
#MENCARI S69
#A3
a3.inisiasi.S69=data.frame(a.r6tminr6*a.r9tminr9,a.r6tminr6*d.r9tminr9,
                           d.r6tminr6*a.r9tminr9,d.r6tminr6*d.r9tminr9)
a3.inisiasi.S69

a3.S69.in=vector()
for(h in 1:n.saham1){
  a3.S69.in[h]=min(a3.inisiasi.S69[h,])
}
a3.S69.in
a3.S69=sum(a3.S69.in)/n.saham1
a3.S69
#B3
b3.inisiasi.S69=data.frame(b.r6tminr6*b.r9tminr9,b.r6tminr6*c.r9tminr9,
                           c.r6tminr6*b.r9tminr9,c.r6tminr6*c.r9tminr9)
b3.inisiasi.S69

b3.S69.in=vector()
for(h in 1:n.saham1){
  b3.S69.in[h]=min(b3.inisiasi.S69[h,])
}
b3.S69.in
b3.S69=sum(b3.S69.in)/n.saham1
b3.S69
#C3
c3.inisiasi.S69=data.frame(b.r6tminr6*b.r9tminr9,b.r6tminr6*c.r9tminr9,
                           c.r6tminr6*b.r9tminr9,c.r6tminr6*c.r9tminr9)
c3.inisiasi.S69
```

```
c3.S69.in=vector()
for(h in 1:n.saham1){
  c3.S69.in[h]=max(b3.inisiasi.S69[h,])
}
c3.S69.in
c3.S69=sum(c3.S69.in)/n.saham1
c3.S69

#D3
d3.inisiasi.S69=data.frame(a.r6tminr6*a.r9tminr9,a.r6tminr6*d.r9tminr9,
                           d.r6tminr6*a.r9tminr9,d.r6tminr6*d.r9tminr9)
d3.inisiasi.S69

d3.S69.in=vector()
for(h in 1:n.saham1){
  d3.S69.in[h]=max(d3.inisiasi.S69[h,])
}
d3.S69.in
d3.S69=sum(d3.S69.in)/n.saham1
d3.S69

#S69
S69=data.frame(a3.S69,b3.S69,c3.S69,d3.S69)
S69
S96=S69

#=====================================================
#MENCARI S610
```

```
#A3
a3.inisiasi.S610=data.frame(a.r6tminr6*a.r10tminr10,a.r6tminr6*d.r10tminr10,
                            d.r6tminr6*a.r10tminr10,d.r6tminr6*d.r10tminr10)
a3.inisiasi.S610

a3.S610.in=vector()
for(h in 1:n.saham1){
  a3.S610.in[h]=min(a3.inisiasi.S610[h,])
}
a3.S610.in
a3.S610=sum(a3.S610.in)/n.saham1
a3.S610
#B3
b3.inisiasi.S610=data.frame(b.r6tminr6*b.r10tminr10,b.r6tminr6*c.r10tminr10,
                            c.r6tminr6*b.r10tminr10,c.r6tminr6*c.r10tminr10)
b3.inisiasi.S610

b3.S610.in=vector()
for(h in 1:n.saham1){
  b3.S610.in[h]=min(b3.inisiasi.S610[h,])
}
b3.S610.in
b3.S610=sum(b3.S610.in)/n.saham1
b3.S610
#C3
c3.inisiasi.S610=data.frame(b.r6tminr6*b.r10tminr10,b.r6tminr6*c.r10tminr10,
                            c.r6tminr6*b.r10tminr10,c.r6tminr6*c.r10tminr10)
c3.inisiasi.S610
```

```
c3.S610.in=vector()
for(h in 1:n.saham1){
  c3.S610.in[h]=max(b3.inisiasi.S610[h,])
}
c3.S610.in
c3.S610=sum(c3.S610.in)/n.saham1
c3.S610

#D3
d3.inisiasi.S610=data.frame(a.r6tminr6*a.r10tminr10,a.r6tminr6*d.r10tminr10,
                            d.r6tminr6*a.r10tminr10,d.r6tminr6*d.r10tminr10)
d3.inisiasi.S610

d3.S610.in=vector()
for(h in 1:n.saham1){
  d3.S610.in[h]=max(d3.inisiasi.S610[h,])
}
d3.S610.in
d3.S610=sum(d3.S610.in)/n.saham1
d3.S610

#S610
S610=data.frame(a3.S610,b3.S610,c3.S610,d3.S610)
S610
S106=S610



#=====================================================
#MENCARI S77
```

```
#A3
a3.inisiasi.S77=data.frame(a.r7tminr7*a.r7tminr7,a.r7tminr7*d.r7tminr7,
                           d.r7tminr7*a.r7tminr7,d.r7tminr7*d.r7tminr7)
a3.inisiasi.S77

a3.S77.in=vector()
for(h in 1:n.saham1){
  a3.S77.in[h]=min(a3.inisiasi.S77[h,])
}
a3.S77.in
a3.S77=sum(a3.S77.in)/n.saham1
a3.S77
#B3
b3.inisiasi.S77=data.frame(b.r7tminr7*b.r7tminr7,b.r7tminr7*c.r7tminr7,
                           c.r7tminr7*b.r7tminr7,c.r7tminr7*c.r7tminr7)
b3.inisiasi.S77

b3.S77.in=vector()
for(h in 1:n.saham1){
  b3.S77.in[h]=min(b3.inisiasi.S77[h,])
}
b3.S77.in
b3.S77=sum(b3.S77.in)/n.saham1
b3.S77
#C3
c3.inisiasi.S77=data.frame(b.r7tminr7*b.r7tminr7,b.r7tminr7*c.r7tminr7,
                           c.r7tminr7*b.r7tminr7,c.r7tminr7*c.r7tminr7)
c3.inisiasi.S77
```

```
c3.S77.in=vector()
for(h in 1:n.saham1){
  c3.S77.in[h]=max(b3.inisiasi.S77[h,])
}
c3.S77.in
c3.S77=sum(c3.S77.in)/n.saham1
c3.S77

#D3
d3.inisiasi.S77=data.frame(a.r7tminr7*a.r7tminr7,a.r7tminr7*d.r7tminr7,
                           d.r7tminr7*a.r7tminr7,d.r7tminr7*d.r7tminr7)
d3.inisiasi.S77

d3.S77.in=vector()
for(h in 1:n.saham1){
  d3.S77.in[h]=max(d3.inisiasi.S77[h,])
}
d3.S77.in
d3.S77=sum(d3.S77.in)/n.saham1
d3.S77

#S77
S77=data.frame(a3.S77,b3.S77,c3.S77,d3.S77)
S77
S77=S77

#=====================================================
#MENCARI S78
#A3
```

```
a3.inisiasi.S78=data.frame(a.r7tminr7*a.r8tminr8,a.r7tminr7*d.r8tminr8,
                           d.r7tminr7*a.r8tminr8,d.r7tminr7*d.r8tminr8)
a3.inisiasi.S78

a3.S78.in=vector()
for(h in 1:n.saham1){
  a3.S78.in[h]=min(a3.inisiasi.S78[h,])
}
a3.S78.in
a3.S78=sum(a3.S78.in)/n.saham1
a3.S78
#B3
b3.inisiasi.S78=data.frame(b.r7tminr7*b.r8tminr8,b.r7tminr7*c.r8tminr8,
                           c.r7tminr7*b.r8tminr8,c.r7tminr7*c.r8tminr8)
b3.inisiasi.S78

b3.S78.in=vector()
for(h in 1:n.saham1){
  b3.S78.in[h]=min(b3.inisiasi.S78[h,])
}
b3.S78.in
b3.S78=sum(b3.S78.in)/n.saham1
b3.S78
#C3
c3.inisiasi.S78=data.frame(b.r7tminr7*b.r8tminr8,b.r7tminr7*c.r8tminr8,
                           c.r7tminr7*b.r8tminr8,c.r7tminr7*c.r8tminr8)
c3.inisiasi.S78

c3.S78.in=vector()
```

```
for(h in 1:n.saham1){
  c3.S78.in[h]=max(b3.inisiasi.S78[h,])
}
c3.S78.in
c3.S78=sum(c3.S78.in)/n.saham1
c3.S78

#D3
d3.inisiasi.S78=data.frame(a.r7tminr7*a.r8tminr8,a.r7tminr7*d.r8tminr8,
                           d.r7tminr7*a.r8tminr8,d.r7tminr7*d.r8tminr8)
d3.inisiasi.S78

d3.S78.in=vector()
for(h in 1:n.saham1){
  d3.S78.in[h]=max(d3.inisiasi.S78[h,])
}
d3.S78.in
d3.S78=sum(d3.S78.in)/n.saham1
d3.S78

#S78
S78=data.frame(a3.S78,b3.S78,c3.S78,d3.S78)
S78
S87=S78

#=====================================================
#MENCARI S79
#A3
a3.inisiasi.S79=data.frame(a.r7tminr7*a.r9tminr9,a.r7tminr7*d.r9tminr9,
```

```
                d.r7tminr7*a.r9tminr9,d.r7tminr7*d.r9tminr9)
a3.inisiasi.S79


a3.S79.in=vector()
for(h in 1:n.saham1){
  a3.S79.in[h]=min(a3.inisiasi.S79[h,])
}
a3.S79.in
a3.S79=sum(a3.S79.in)/n.saham1
a3.S79
#B3
b3.inisiasi.S79=data.frame(b.r7tminr7*b.r9tminr9,b.r7tminr7*c.r9tminr9,
                c.r7tminr7*b.r9tminr9,c.r7tminr7*c.r9tminr9)
b3.inisiasi.S79


b3.S79.in=vector()
for(h in 1:n.saham1){
  b3.S79.in[h]=min(b3.inisiasi.S79[h,])
}
b3.S79.in
b3.S79=sum(b3.S79.in)/n.saham1
b3.S79
#C3
c3.inisiasi.S79=data.frame(b.r7tminr7*b.r9tminr9,b.r7tminr7*c.r9tminr9,
                c.r7tminr7*b.r9tminr9,c.r7tminr7*c.r9tminr9)
c3.inisiasi.S79


c3.S79.in=vector()
for(h in 1:n.saham1){
```

```
  c3.S79.in[h]=max(b3.inisiasi.S79[h,])
}
c3.S79.in
c3.S79=sum(c3.S79.in)/n.saham1
c3.S79

#D3
d3.inisiasi.S79=data.frame(a.r7tminr7*a.r9tminr9,a.r7tminr7*d.r9tminr9,
                           d.r7tminr7*a.r9tminr9,d.r7tminr7*d.r9tminr9)
d3.inisiasi.S79

d3.S79.in=vector()
for(h in 1:n.saham1){
  d3.S79.in[h]=max(d3.inisiasi.S79[h,])
}
d3.S79.in
d3.S79=sum(d3.S79.in)/n.saham1
d3.S79

#S79
S79=data.frame(a3.S79,b3.S79,c3.S79,d3.S79)
S79
S97=S79

#=====================================================
#MENCARI S710
#A3
a3.inisiasi.S710=data.frame(a.r7tminr7*a.r10tminr10,a.r7tminr7*d.r10tminr10,
                            d.r7tminr7*a.r10tminr10,d.r7tminr7*d.r10tminr10)
```

```
a3.inisiasi.S710


a3.S710.in=vector()
for(h in 1:n.saham1){
  a3.S710.in[h]=min(a3.inisiasi.S710[h,])
}
a3.S710.in
a3.S710=sum(a3.S710.in)/n.saham1
a3.S710
#B3
b3.inisiasi.S710=data.frame(b.r7tminr7*b.r10tminr10,b.r7tminr7*c.r10tminr10,
                            c.r7tminr7*b.r10tminr10,c.r7tminr7*c.r10tminr10)
b3.inisiasi.S710


b3.S710.in=vector()
for(h in 1:n.saham1){
  b3.S710.in[h]=min(b3.inisiasi.S710[h,])
}
b3.S710.in
b3.S710=sum(b3.S710.in)/n.saham1
b3.S710
#C3
c3.inisiasi.S710=data.frame(b.r7tminr7*b.r10tminr10,b.r7tminr7*c.r10tminr10,
                            c.r7tminr7*b.r10tminr10,c.r7tminr7*c.r10tminr10)
c3.inisiasi.S710


c3.S710.in=vector()
for(h in 1:n.saham1){
  c3.S710.in[h]=max(b3.inisiasi.S710[h,])
```

```
}
c3.S710.in
c3.S710=sum(c3.S710.in)/n.saham1
c3.S710

#D3
d3.inisiasi.S710=data.frame(a.r7tminr7*a.r10tminr10,a.r7tminr7*d.r10tminr10,
                            d.r7tminr7*a.r10tminr10,d.r7tminr7*d.r10tminr10)
d3.inisiasi.S710

d3.S710.in=vector()
for(h in 1:n.saham1){
  d3.S710.in[h]=max(d3.inisiasi.S710[h,])
}
d3.S710.in
d3.S710=sum(d3.S710.in)/n.saham1
d3.S710

#S710
S710=data.frame(a3.S710,b3.S710,c3.S710,d3.S710)
S710
S107=S710



#=====================================================
#MENCARI S88
#A3
a3.inisiasi.S88=data.frame(a.r8tminr8*a.r8tminr8,a.r8tminr8*d.r8tminr8,
                           d.r8tminr8*a.r8tminr8,d.r8tminr8*d.r8tminr8)
```

```
a3.inisiasi.S88


a3.S88.in=vector()
for(h in 1:n.saham1){
  a3.S88.in[h]=min(a3.inisiasi.S88[h,])
}
a3.S88.in
a3.S88=sum(a3.S88.in)/n.saham1
a3.S88
#B3
b3.inisiasi.S88=data.frame(b.r8tminr8*b.r8tminr8,b.r8tminr8*c.r8tminr8,
                           c.r8tminr8*b.r8tminr8,c.r8tminr8*c.r8tminr8)
b3.inisiasi.S88


b3.S88.in=vector()
for(h in 1:n.saham1){
  b3.S88.in[h]=min(b3.inisiasi.S88[h,])
}
b3.S88.in
b3.S88=sum(b3.S88.in)/n.saham1
b3.S88
#C3
c3.inisiasi.S88=data.frame(b.r8tminr8*b.r8tminr8,b.r8tminr8*c.r8tminr8,
                           c.r8tminr8*b.r8tminr8,c.r8tminr8*c.r8tminr8)
c3.inisiasi.S88


c3.S88.in=vector()
for(h in 1:n.saham1){
  c3.S88.in[h]=max(b3.inisiasi.S88[h,])
```

```
}
c3.S88.in
c3.S88=sum(c3.S88.in)/n.saham1
c3.S88

#D3
d3.inisiasi.S88=data.frame(a.r8tminr8*a.r8tminr8,a.r8tminr8*d.r8tminr8,
                           d.r8tminr8*a.r8tminr8,d.r8tminr8*d.r8tminr8)
d3.inisiasi.S88

d3.S88.in=vector()
for(h in 1:n.saham1){
  d3.S88.in[h]=max(d3.inisiasi.S88[h,])
}
d3.S88.in
d3.S88=sum(d3.S88.in)/n.saham1
d3.S88

#S88
S88=data.frame(a3.S88,b3.S88,c3.S88,d3.S88)
S88
S88=S88

#=====================================================
#MENCARI S89
#A3
a3.inisiasi.S89=data.frame(a.r8tminr8*a.r9tminr9,a.r8tminr8*d.r9tminr9,
                           d.r8tminr8*a.r9tminr9,d.r8tminr8*d.r9tminr9)
a3.inisiasi.S89
```

```
a3.S89.in=vector()
for(h in 1:n.saham1){
  a3.S89.in[h]=min(a3.inisiasi.S89[h,])
}
a3.S89.in
a3.S89=sum(a3.S89.in)/n.saham1
a3.S89
#B3
b3.inisiasi.S89=data.frame(b.r8tminr8*b.r9tminr9,b.r8tminr8*c.r9tminr9,
                           c.r8tminr8*b.r9tminr9,c.r8tminr8*c.r9tminr9)
b3.inisiasi.S89

b3.S89.in=vector()
for(h in 1:n.saham1){
  b3.S89.in[h]=min(b3.inisiasi.S89[h,])
}
b3.S89.in
b3.S89=sum(b3.S89.in)/n.saham1
b3.S89
#C3
c3.inisiasi.S89=data.frame(b.r8tminr8*b.r9tminr9,b.r8tminr8*c.r9tminr9,
                           c.r8tminr8*b.r9tminr9,c.r8tminr8*c.r9tminr9)
c3.inisiasi.S89

c3.S89.in=vector()
for(h in 1:n.saham1){
  c3.S89.in[h]=max(b3.inisiasi.S89[h,])
}
```

```
c3.S89.in
c3.S89=sum(c3.S89.in)/n.saham1
c3.S89

#D3
d3.inisiasi.S89=data.frame(a.r8tminr8*a.r9tminr9,a.r8tminr8*d.r9tminr9,
                           d.r8tminr8*a.r9tminr9,d.r8tminr8*d.r9tminr9)
d3.inisiasi.S89

d3.S89.in=vector()
for(h in 1:n.saham1){
  d3.S89.in[h]=max(d3.inisiasi.S89[h,])
}
d3.S89.in
d3.S89=sum(d3.S89.in)/n.saham1
d3.S89

#S89
S89=data.frame(a3.S89,b3.S89,c3.S89,d3.S89)
S89
S98=S89

#=====================================================
#MENCARI S810
#A3
a3.inisiasi.S810=data.frame(a.r8tminr8*a.r10tminr10,a.r8tminr8*d.r10tminr10,
                            d.r8tminr8*a.r10tminr10,d.r8tminr8*d.r10tminr10)
a3.inisiasi.S810
```

```
a3.S810.in=vector()
for(h in 1:n.saham1){
  a3.S810.in[h]=min(a3.inisiasi.S810[h,])
}
a3.S810.in
a3.S810=sum(a3.S810.in)/n.saham1
a3.S810
#B3
b3.inisiasi.S810=data.frame(b.r8tminr8*b.r10tminr10,b.r8tminr8*c.r10tminr10,
                            c.r8tminr8*b.r10tminr10,c.r8tminr8*c.r10tminr10)
b3.inisiasi.S810

b3.S810.in=vector()
for(h in 1:n.saham1){
  b3.S810.in[h]=min(b3.inisiasi.S810[h,])
}
b3.S810.in
b3.S810=sum(b3.S810.in)/n.saham1
b3.S810
#C3
c3.inisiasi.S810=data.frame(b.r8tminr8*b.r10tminr10,b.r8tminr8*c.r10tminr10,
                            c.r8tminr8*b.r10tminr10,c.r8tminr8*c.r10tminr10)
c3.inisiasi.S810

c3.S810.in=vector()
for(h in 1:n.saham1){
  c3.S810.in[h]=max(b3.inisiasi.S810[h,])
}
c3.S810.in
```

```
c3.S810=sum(c3.S810.in)/n.saham1
c3.S810

#D3
d3.inisiasi.S810=data.frame(a.r8tminr8*a.r10tminr10,a.r8tminr8*d.r10tminr10,
                           d.r8tminr8*a.r10tminr10,d.r8tminr8*d.r10tminr10)
d3.inisiasi.S810

d3.S810.in=vector()
for(h in 1:n.saham1){
  d3.S810.in[h]=max(d3.inisiasi.S810[h,])
}
d3.S810.in
d3.S810=sum(d3.S810.in)/n.saham1
d3.S810

#S810
S810=data.frame(a3.S810,b3.S810,c3.S810,d3.S810)
S810
S108=S810

#=====================================================
#MENCARI S99
#A3
a3.inisiasi.S99=data.frame(a.r9tminr9*a.r9tminr9,a.r9tminr9*d.r9tminr9,
                           d.r9tminr9*a.r9tminr9,d.r9tminr9*d.r9tminr9)
a3.inisiasi.S99

a3.S99.in=vector()
```

```
for(h in 1:n.saham1){
  a3.S99.in[h]=min(a3.inisiasi.S99[h,])
}
a3.S99.in
a3.S99=sum(a3.S99.in)/n.saham1
a3.S99
#B3
b3.inisiasi.S99=data.frame(b.r9tminr9*b.r9tminr9,b.r9tminr9*c.r9tminr9,
                           c.r9tminr9*b.r9tminr9,c.r9tminr9*c.r9tminr9)
b3.inisiasi.S99

b3.S99.in=vector()
for(h in 1:n.saham1){
  b3.S99.in[h]=min(b3.inisiasi.S99[h,])
}
b3.S99.in
b3.S99=sum(b3.S99.in)/n.saham1
b3.S99
#C3
c3.inisiasi.S99=data.frame(b.r9tminr9*b.r9tminr9,b.r9tminr9*c.r9tminr9,
                           c.r9tminr9*b.r9tminr9,c.r9tminr9*c.r9tminr9)
c3.inisiasi.S99

c3.S99.in=vector()
for(h in 1:n.saham1){
  c3.S99.in[h]=max(b3.inisiasi.S99[h,])
}
c3.S99.in
c3.S99=sum(c3.S99.in)/n.saham1
```

```
c3.S99

#D3
d3.inisiasi.S99=data.frame(a.r9tminr9*a.r9tminr9,a.r9tminr9*d.r9tminr9,
                           d.r9tminr9*a.r9tminr9,d.r9tminr9*d.r9tminr9)
d3.inisiasi.S99

d3.S99.in=vector()
for(h in 1:n.saham1){
  d3.S99.in[h]=max(d3.inisiasi.S99[h,])
}
d3.S99.in
d3.S99=sum(d3.S99.in)/n.saham1
d3.S99

#S99
S99=data.frame(a3.S99,b3.S99,c3.S99,d3.S99)
S99
S99=S99

#=====================================================
#MENCARI S910
#A3
a3.inisiasi.S910=data.frame(a.r9tminr9*a.r10tminr10,a.r9tminr9*d.r10tminr10,
                            d.r9tminr9*a.r10tminr10,d.r9tminr9*d.r10tminr10)
a3.inisiasi.S910

a3.S910.in=vector()
for(h in 1:n.saham1){
```

```
  a3.S910.in[h]=min(a3.inisiasi.S910[h,])
}
a3.S910.in
a3.S910=sum(a3.S910.in)/n.saham1
a3.S910
#B3
b3.inisiasi.S910=data.frame(b.r9tminr9*b.r10tminr10,b.r9tminr9*c.r10tminr10,
                            c.r9tminr9*b.r10tminr10,c.r9tminr9*c.r10tminr10)
b3.inisiasi.S910

b3.S910.in=vector()
for(h in 1:n.saham1){
  b3.S910.in[h]=min(b3.inisiasi.S910[h,])
}
b3.S910.in
b3.S910=sum(b3.S910.in)/n.saham1
b3.S910
#C3
c3.inisiasi.S910=data.frame(b.r9tminr9*b.r10tminr10,b.r9tminr9*c.r10tminr10,
                            c.r9tminr9*b.r10tminr10,c.r9tminr9*c.r10tminr10)
c3.inisiasi.S910

c3.S910.in=vector()
for(h in 1:n.saham1){
  c3.S910.in[h]=max(b3.inisiasi.S910[h,])
}
c3.S910.in
c3.S910=sum(c3.S910.in)/n.saham1
c3.S910
```

```
#D3
d3.inisiasi.S910=data.frame(a.r9tminr9*a.r10tminr10,a.r9tminr9*d.r10tminr10,
                           d.r9tminr9*a.r10tminr10,d.r9tminr9*d.r10tminr10)
d3.inisiasi.S910

d3.S910.in=vector()
for(h in 1:n.saham1){
  d3.S910.in[h]=max(d3.inisiasi.S910[h,])
}
d3.S910.in
d3.S910=sum(d3.S910.in)/n.saham1
d3.S910

#S910
S910=data.frame(a3.S910,b3.S910,c3.S910,d3.S910)
S910
S109=S910

#=====================================================
#MENCARI S1010
#A3
a3.inisiasi.S1010=data.frame(a.r10tminr10*a.r10tminr10,a.r10tminr10*d.r10tminr10,
                            d.r10tminr10*a.r10tminr10,d.r10tminr10*d.r10tminr10)
a3.inisiasi.S1010

a3.S1010.in=vector()
for(h in 1:n.saham1){
  a3.S1010.in[h]=min(a3.inisiasi.S1010[h,])
```

```
}
a3.S1010.in
a3.S1010=sum(a3.S1010.in)/n.saham1
a3.S1010
#B3
b3.inisiasi.S1010=data.frame(b.r10tminr10*b.r10tminr10,b.r10tminr10*c.r10tminr10,
                             c.r10tminr10*b.r10tminr10,c.r10tminr10*c.r10tminr10)
b3.inisiasi.S1010

b3.S1010.in=vector()
for(h in 1:n.saham1){
  b3.S1010.in[h]=min(b3.inisiasi.S1010[h,])
}
b3.S1010.in
b3.S1010=sum(b3.S1010.in)/n.saham1
b3.S1010
#C3
c3.inisiasi.S1010=data.frame(b.r10tminr10*b.r10tminr10,b.r10tminr10*c.r10tminr10,
                             c.r10tminr10*b.r10tminr10,c.r10tminr10*c.r10tminr10)
c3.inisiasi.S1010

c3.S1010.in=vector()
for(h in 1:n.saham1){
  c3.S1010.in[h]=max(b3.inisiasi.S1010[h,])
}
c3.S1010.in
c3.S1010=sum(c3.S1010.in)/n.saham1
c3.S1010
```

```
#D3
d3.inisiasi.S1010=data.frame(a.r10tminr10*a.r10tminr10,a.r10tminr10*d.r10tminr10,
                             d.r10tminr10*a.r10tminr10,d.r10tminr10*d.r10tminr10)
d3.inisiasi.S1010

d3.S1010.in=vector()
for(h in 1:n.saham1){
  d3.S1010.in[h]=max(d3.inisiasi.S1010[h,])
}
d3.S1010.in
d3.S1010=sum(d3.S1010.in)/n.saham1
d3.S1010

#S1010
S1010=data.frame(a3.S1010,b3.S1010,c3.S1010,d3.S1010)
S1010
#MENAMPILKAN SEMUA Sij
s11
s12
s13
s14
s15
S16
S17
S18
S19
S110
S22
S23
```

S24

S25

S26

S27

S28

S29

S210

S33

S34

S35

S36

S37

S38

S39

S310

S44

S45

S46

S47

S48

S49

S410

S55

S56

S57

S58

S59

S510

S66

S67

S68

S69

S610

S77

S78

S79

S710

S88

S89

S810

S99

S910

S1010

#DATA FRAME Sij.saham

```
names(s11)[names(s11) == "a3.s11"] <- "a"
names(s11)[names(s11) == "b3.s11"] <- "b"
names(s11)[names(s11) == "c3.s11"] <- "c"
names(s11)[names(s11) == "d3.s11"] <- "d"

names(s12)[names(s12) == "a3.s12"] <- "a"
names(s12)[names(s12) == "b3.s12"] <- "b"
names(s12)[names(s12) == "c3.s12"] <- "c"
names(s12)[names(s12) == "d3.s12"] <- "d"
```

```
names(s13)[names(s13) == "a3.s13"] <- "a"
names(s13)[names(s13) == "b3.s13"] <- "b"
names(s13)[names(s13) == "c3.s13"] <- "c"
names(s13)[names(s13) == "d3.s13"] <- "d"

names(s14)[names(s14) == "a3.s14"] <- "a"
names(s14)[names(s14) == "b3.s14"] <- "b"
names(s14)[names(s14) == "c3.s14"] <- "c"
names(s14)[names(s14) == "d3.s14"] <- "d"

names(s15)[names(s15) == "a3.s15"] <- "a"
names(s15)[names(s15) == "b3.s15"] <- "b"
names(s15)[names(s15) == "c3.s15"] <- "c"
names(s15)[names(s15) == "d3.s15"] <- "d"

names(S16)[names(S16) == "a3.S16"] <- "a"
names(S16)[names(S16) == "b3.S16"] <- "b"
names(S16)[names(S16) == "c3.S16"] <- "c"
names(S16)[names(S16) == "d3.S16"] <- "d"

names(S17)[names(S17) == "a3.S17"] <- "a"
names(S17)[names(S17) == "b3.S17"] <- "b"
names(S17)[names(S17) == "c3.S17"] <- "c"
names(S17)[names(S17) == "d3.S17"] <- "d"

names(S18)[names(S18) == "a3.S18"] <- "a"
names(S18)[names(S18) == "b3.S18"] <- "b"
names(S18)[names(S18) == "c3.S18"] <- "c"
names(S18)[names(S18) == "d3.S18"] <- "d"
```

```
names(S19)[names(S19) == "a3.S19"] <- "a"
names(S19)[names(S19) == "b3.S19"] <- "b"
names(S19)[names(S19) == "c3.S19"] <- "c"
names(S19)[names(S19) == "d3.S19"] <- "d"

names(S110)[names(S110) == "a3.S110"] <- "a"
names(S110)[names(S110) == "b3.S110"] <- "b"
names(S110)[names(S110) == "c3.S110"] <- "c"
names(S110)[names(S110) == "d3.S110"] <- "d"

names(s21)[names(s21) == "a3.s21"] <- "a"
names(s21)[names(s21) == "b3.s21"] <- "b"
names(s21)[names(s21) == "c3.s21"] <- "c"
names(s21)[names(s21) == "d3.s21"] <- "d"

names(S22)[names(S22) == "a3.S22"] <- "a"
names(S22)[names(S22) == "b3.S22"] <- "b"
names(S22)[names(S22) == "c3.S22"] <- "c"
names(S22)[names(S22) == "d3.S22"] <- "d"

names(S23)[names(S23) == "a3.S23"] <- "a"
names(S23)[names(S23) == "b3.S23"] <- "b"
names(S23)[names(S23) == "c3.S23"] <- "c"
names(S23)[names(S23) == "d3.S23"] <- "d"

names(S24)[names(S24) == "a3.S24"] <- "a"
names(S24)[names(S24) == "b3.S24"] <- "b"
names(S24)[names(S24) == "c3.S24"] <- "c"
```

```
names(S24)[names(S24) == "d3.S24"] <- "d"

names(S25)[names(S25) == "a3.S25"] <- "a"
names(S25)[names(S25) == "b3.S25"] <- "b"
names(S25)[names(S25) == "c3.S25"] <- "c"
names(S25)[names(S25) == "d3.S25"] <- "d"

names(S26)[names(S26) == "a3.S26"] <- "a"
names(S26)[names(S26) == "b3.S26"] <- "b"
names(S26)[names(S26) == "c3.S26"] <- "c"
names(S26)[names(S26) == "d3.S26"] <- "d"

names(S27)[names(S27) == "a3.S27"] <- "a"
names(S27)[names(S27) == "b3.S27"] <- "b"
names(S27)[names(S27) == "c3.S27"] <- "c"
names(S27)[names(S27) == "d3.S27"] <- "d"

names(S28)[names(S28) == "a3.S28"] <- "a"
names(S28)[names(S28) == "b3.S28"] <- "b"
names(S28)[names(S28) == "c3.S28"] <- "c"
names(S28)[names(S28) == "d3.S28"] <- "d"

names(S29)[names(S29) == "a3.S29"] <- "a"
names(S29)[names(S29) == "b3.S29"] <- "b"
names(S29)[names(S29) == "c3.S29"] <- "c"
names(S29)[names(S29) == "d3.S29"] <- "d"

names(S210)[names(S210) == "a3.S210"] <- "a"
names(S210)[names(S210) == "b3.S210"] <- "b"
```

```
names(S210)[names(S210) == "c3.S210"] <- "c"
names(S210)[names(S210) == "d3.S210"] <- "d"

names(s31)[names(s31) == "a3.s31"] <- "a"
names(s31)[names(s31) == "b3.s31"] <- "b"
names(s31)[names(s31) == "c3.s31"] <- "c"
names(s31)[names(s31) == "d3.s31"] <- "d"

names(S32)[names(S32) == "a3.S32"] <- "a"
names(S32)[names(S32) == "b3.S32"] <- "b"
names(S32)[names(S32) == "c3.S32"] <- "c"
names(S32)[names(S32) == "d3.S32"] <- "d"

names(S33)[names(S33) == "a3.S33"] <- "a"
names(S33)[names(S33) == "b3.S33"] <- "b"
names(S33)[names(S33) == "c3.S33"] <- "c"
names(S33)[names(S33) == "d3.S33"] <- "d"

names(S34)[names(S34) == "a3.S34"] <- "a"
names(S34)[names(S34) == "b3.S34"] <- "b"
names(S34)[names(S34) == "c3.S34"] <- "c"
names(S34)[names(S34) == "d3.S34"] <- "d"

names(S35)[names(S35) == "a3.S35"] <- "a"
names(S35)[names(S35) == "b3.S35"] <- "b"
names(S35)[names(S35) == "c3.S35"] <- "c"
names(S35)[names(S35) == "d3.S35"] <- "d"

names(S36)[names(S36) == "a3.S36"] <- "a"
```

```
names(S36)[names(S36) == "b3.S36"] <- "b"
names(S36)[names(S36) == "c3.S36"] <- "c"
names(S36)[names(S36) == "d3.S36"] <- "d"

names(S37)[names(S37) == "a3.S37"] <- "a"
names(S37)[names(S37) == "b3.S37"] <- "b"
names(S37)[names(S37) == "c3.S37"] <- "c"
names(S37)[names(S37) == "d3.S37"] <- "d"

names(S38)[names(S38) == "a3.S38"] <- "a"
names(S38)[names(S38) == "b3.S38"] <- "b"
names(S38)[names(S38) == "c3.S38"] <- "c"
names(S38)[names(S38) == "d3.S38"] <- "d"

names(S39)[names(S39) == "a3.S39"] <- "a"
names(S39)[names(S39) == "b3.S39"] <- "b"
names(S39)[names(S39) == "c3.S39"] <- "c"
names(S39)[names(S39) == "d3.S39"] <- "d"

names(S310)[names(S310) == "a3.S310"] <- "a"
names(S310)[names(S310) == "b3.S310"] <- "b"
names(S310)[names(S310) == "c3.S310"] <- "c"
names(S310)[names(S310) == "d3.S310"] <- "d"

names(s41)[names(s41) == "a3.s41"] <- "a"
names(s41)[names(s41) == "b3.s41"] <- "b"
names(s41)[names(s41) == "c3.s41"] <- "c"
names(s41)[names(s41) == "d3.s41"] <- "d"
```

```
names(S42)[names(S42) == "a3.S42"] <- "a"
names(S42)[names(S42) == "b3.S42"] <- "b"
names(S42)[names(S42) == "c3.S42"] <- "c"
names(S42)[names(S42) == "d3.S42"] <- "d"

names(S43)[names(S43) == "a3.S43"] <- "a"
names(S43)[names(S43) == "b3.S43"] <- "b"
names(S43)[names(S43) == "c3.S43"] <- "c"
names(S43)[names(S43) == "d3.S43"] <- "d"

names(S44)[names(S44) == "a3.S44"] <- "a"
names(S44)[names(S44) == "b3.S44"] <- "b"
names(S44)[names(S44) == "c3.S44"] <- "c"
names(S44)[names(S44) == "d3.S44"] <- "d"

names(S45)[names(S45) == "a3.S45"] <- "a"
names(S45)[names(S45) == "b3.S45"] <- "b"
names(S45)[names(S45) == "c3.S45"] <- "c"
names(S45)[names(S45) == "d3.S45"] <- "d"

names(S46)[names(S46) == "a3.S46"] <- "a"
names(S46)[names(S46) == "b3.S46"] <- "b"
names(S46)[names(S46) == "c3.S46"] <- "c"
names(S46)[names(S46) == "d3.S46"] <- "d"

names(S47)[names(S47) == "a3.S47"] <- "a"
names(S47)[names(S47) == "b3.S47"] <- "b"
names(S47)[names(S47) == "c3.S47"] <- "c"
names(S47)[names(S47) == "d3.S47"] <- "d"
```

```
names(S48)[names(S48) == "a3.S48"] <- "a"
names(S48)[names(S48) == "b3.S48"] <- "b"
names(S48)[names(S48) == "c3.S48"] <- "c"
names(S48)[names(S48) == "d3.S48"] <- "d"

names(S49)[names(S49) == "a3.S49"] <- "a"
names(S49)[names(S49) == "b3.S49"] <- "b"
names(S49)[names(S49) == "c3.S49"] <- "c"
names(S49)[names(S49) == "d3.S49"] <- "d"

names(S410)[names(S410) == "a3.S410"] <- "a"
names(S410)[names(S410) == "b3.S410"] <- "b"
names(S410)[names(S410) == "c3.S410"] <- "c"
names(S410)[names(S410) == "d3.S410"] <- "d"

names(s51)[names(s51) == "a3.s51"] <- "a"
names(s51)[names(s51) == "b3.s51"] <- "b"
names(s51)[names(s51) == "c3.s51"] <- "c"
names(s51)[names(s51) == "d3.s51"] <- "d"

names(S52)[names(S52) == "a3.S52"] <- "a"
names(S52)[names(S52) == "b3.S52"] <- "b"
names(S52)[names(S52) == "c3.S52"] <- "c"
names(S52)[names(S52) == "d3.S52"] <- "d"

names(S53)[names(S53) == "a3.S53"] <- "a"
names(S53)[names(S53) == "b3.S53"] <- "b"
names(S53)[names(S53) == "c3.S53"] <- "c"
```

```
names(S53)[names(S53) == "d3.S53"] <- "d"

names(S54)[names(S54) == "a3.S54"] <- "a"
names(S54)[names(S54) == "b3.S54"] <- "b"
names(S54)[names(S54) == "c3.S54"] <- "c"
names(S54)[names(S54) == "d3.S54"] <- "d"

names(S55)[names(S55) == "a3.S55"] <- "a"
names(S55)[names(S55) == "b3.S55"] <- "b"
names(S55)[names(S55) == "c3.S55"] <- "c"
names(S55)[names(S55) == "d3.S55"] <- "d"

names(S56)[names(S56) == "a3.S56"] <- "a"
names(S56)[names(S56) == "b3.S56"] <- "b"
names(S56)[names(S56) == "c3.S56"] <- "c"
names(S56)[names(S56) == "d3.S56"] <- "d"

names(S57)[names(S57) == "a3.S57"] <- "a"
names(S57)[names(S57) == "b3.S57"] <- "b"
names(S57)[names(S57) == "c3.S57"] <- "c"
names(S57)[names(S57) == "d3.S57"] <- "d"

names(S58)[names(S58) == "a3.S58"] <- "a"
names(S58)[names(S58) == "b3.S58"] <- "b"
names(S58)[names(S58) == "c3.S58"] <- "c"
names(S58)[names(S58) == "d3.S58"] <- "d"

names(S59)[names(S59) == "a3.S59"] <- "a"
names(S59)[names(S59) == "b3.S59"] <- "b"
```

```
names(S59)[names(S59) == "c3.S59"] <- "c"
names(S59)[names(S59) == "d3.S59"] <- "d"

names(S510)[names(S510) == "a3.S510"] <- "a"
names(S510)[names(S510) == "b3.S510"] <- "b"
names(S510)[names(S510) == "c3.S510"] <- "c"
names(S510)[names(S510) == "d3.S510"] <- "d"

names(s61)[names(s61) == "a3.s61"] <- "a"
names(s61)[names(s61) == "b3.s61"] <- "b"
names(s61)[names(s61) == "c3.s61"] <- "c"
names(s61)[names(s61) == "d3.s61"] <- "d"

names(S62)[names(S62) == "a3.S62"] <- "a"
names(S62)[names(S62) == "b3.S62"] <- "b"
names(S62)[names(S62) == "c3.S62"] <- "c"
names(S62)[names(S62) == "d3.S62"] <- "d"

names(S63)[names(S63) == "a3.S63"] <- "a"
names(S63)[names(S63) == "b3.S63"] <- "b"
names(S63)[names(S63) == "c3.S63"] <- "c"
names(S63)[names(S63) == "d3.S63"] <- "d"

names(S64)[names(S64) == "a3.S64"] <- "a"
names(S64)[names(S64) == "b3.S64"] <- "b"
names(S64)[names(S64) == "c3.S64"] <- "c"
names(S64)[names(S64) == "d3.S64"] <- "d"

names(S65)[names(S65) == "a3.S65"] <- "a"
```

```
names(S65)[names(S65) == "b3.S65"] <- "b"
names(S65)[names(S65) == "c3.S65"] <- "c"
names(S65)[names(S65) == "d3.S65"] <- "d"

names(S66)[names(S66) == "a3.S66"] <- "a"
names(S66)[names(S66) == "b3.S66"] <- "b"
names(S66)[names(S66) == "c3.S66"] <- "c"
names(S66)[names(S66) == "d3.S66"] <- "d"

names(S67)[names(S67) == "a3.S67"] <- "a"
names(S67)[names(S67) == "b3.S67"] <- "b"
names(S67)[names(S67) == "c3.S67"] <- "c"
names(S67)[names(S67) == "d3.S67"] <- "d"

names(S68)[names(S68) == "a3.S68"] <- "a"
names(S68)[names(S68) == "b3.S68"] <- "b"
names(S68)[names(S68) == "c3.S68"] <- "c"
names(S68)[names(S68) == "d3.S68"] <- "d"

names(S69)[names(S69) == "a3.S69"] <- "a"
names(S69)[names(S69) == "b3.S69"] <- "b"
names(S69)[names(S69) == "c3.S69"] <- "c"
names(S69)[names(S69) == "d3.S69"] <- "d"

names(S610)[names(S610) == "a3.S610"] <- "a"
names(S610)[names(S610) == "b3.S610"] <- "b"
names(S610)[names(S610) == "c3.S610"] <- "c"
names(S610)[names(S610) == "d3.S610"] <- "d"
```

```
names(S71)[names(S71) == "a3.S71"] <- "a"
names(S71)[names(S71) == "b3.S71"] <- "b"
names(S71)[names(S71) == "c3.S71"] <- "c"
names(S71)[names(S71) == "d3.S71"] <- "d"

names(S72)[names(S72) == "a3.S72"] <- "a"
names(S72)[names(S72) == "b3.S72"] <- "b"
names(S72)[names(S72) == "c3.S72"] <- "c"
names(S72)[names(S72) == "d3.S72"] <- "d"

names(S73)[names(S73) == "a3.S73"] <- "a"
names(S73)[names(S73) == "b3.S73"] <- "b"
names(S73)[names(S73) == "c3.S73"] <- "c"
names(S73)[names(S73) == "d3.S73"] <- "d"

names(S74)[names(S74) == "a3.S74"] <- "a"
names(S74)[names(S74) == "b3.S74"] <- "b"
names(S74)[names(S74) == "c3.S74"] <- "c"
names(S74)[names(S74) == "d3.S74"] <- "d"

names(S75)[names(S75) == "a3.S75"] <- "a"
names(S75)[names(S75) == "b3.S75"] <- "b"
names(S75)[names(S75) == "c3.S75"] <- "c"
names(S75)[names(S75) == "d3.S75"] <- "d"

names(S76)[names(S76) == "a3.S76"] <- "a"
names(S76)[names(S76) == "b3.S76"] <- "b"
names(S76)[names(S76) == "c3.S76"] <- "c"
names(S76)[names(S76) == "d3.S76"] <- "d"
```

```
names(S77)[names(S77) == "a3.S77"] <- "a"
names(S77)[names(S77) == "b3.S77"] <- "b"
names(S77)[names(S77) == "c3.S77"] <- "c"
names(S77)[names(S77) == "d3.S77"] <- "d"

names(S78)[names(S78) == "a3.S78"] <- "a"
names(S78)[names(S78) == "b3.S78"] <- "b"
names(S78)[names(S78) == "c3.S78"] <- "c"
names(S78)[names(S78) == "d3.S78"] <- "d"

names(S79)[names(S79) == "a3.S79"] <- "a"
names(S79)[names(S79) == "b3.S79"] <- "b"
names(S79)[names(S79) == "c3.S79"] <- "c"
names(S79)[names(S79) == "d3.S79"] <- "d"

names(S710)[names(S710) == "a3.S710"] <- "a"
names(S710)[names(S710) == "b3.S710"] <- "b"
names(S710)[names(S710) == "c3.S710"] <- "c"
names(S710)[names(S710) == "d3.S710"] <- "d"

names(S81)[names(S81) == "a3.S81"] <- "a"
names(S81)[names(S81) == "b3.S81"] <- "b"
names(S81)[names(S81) == "c3.S81"] <- "c"
names(S81)[names(S81) == "d3.S81"] <- "d"

names(S82)[names(S82) == "a3.S82"] <- "a"
names(S82)[names(S82) == "b3.S82"] <- "b"
names(S82)[names(S82) == "c3.S82"] <- "c"
```

```
names(S82)[names(S82) == "d3.S82"] <- "d"

names(S83)[names(S83) == "a3.S83"] <- "a"
names(S83)[names(S83) == "b3.S83"] <- "b"
names(S83)[names(S83) == "c3.S83"] <- "c"
names(S83)[names(S83) == "d3.S83"] <- "d"

names(S84)[names(S84) == "a3.S84"] <- "a"
names(S84)[names(S84) == "b3.S84"] <- "b"
names(S84)[names(S84) == "c3.S84"] <- "c"
names(S84)[names(S84) == "d3.S84"] <- "d"

names(S85)[names(S85) == "a3.S85"] <- "a"
names(S85)[names(S85) == "b3.S85"] <- "b"
names(S85)[names(S85) == "c3.S85"] <- "c"
names(S85)[names(S85) == "d3.S85"] <- "d"

names(S86)[names(S86) == "a3.S86"] <- "a"
names(S86)[names(S86) == "b3.S86"] <- "b"
names(S86)[names(S86) == "c3.S86"] <- "c"
names(S86)[names(S86) == "d3.S86"] <- "d"

names(S87)[names(S87) == "a3.S87"] <- "a"
names(S87)[names(S87) == "b3.S87"] <- "b"
names(S87)[names(S87) == "c3.S87"] <- "c"
names(S87)[names(S87) == "d3.S87"] <- "d"

names(S88)[names(S88) == "a3.S88"] <- "a"
names(S88)[names(S88) == "b3.S88"] <- "b"
```

```
names(S88)[names(S88) == "c3.S88"] <- "c"
names(S88)[names(S88) == "d3.S88"] <- "d"

names(S89)[names(S89) == "a3.S89"] <- "a"
names(S89)[names(S89) == "b3.S89"] <- "b"
names(S89)[names(S89) == "c3.S89"] <- "c"
names(S89)[names(S89) == "d3.S89"] <- "d"

names(S810)[names(S810) == "a3.S810"] <- "a"
names(S810)[names(S810) == "b3.S810"] <- "b"
names(S810)[names(S810) == "c3.S810"] <- "c"
names(S810)[names(S810) == "d3.S810"] <- "d"

names(S91)[names(S91) == "a3.S91"] <- "a"
names(S91)[names(S91) == "b3.S91"] <- "b"
names(S91)[names(S91) == "c3.S91"] <- "c"
names(S91)[names(S91) == "d3.S91"] <- "d"

names(S92)[names(S92) == "a3.S92"] <- "a"
names(S92)[names(S92) == "b3.S92"] <- "b"
names(S92)[names(S92) == "c3.S92"] <- "c"
names(S92)[names(S92) == "d3.S92"] <- "d"

names(S93)[names(S93) == "a3.S93"] <- "a"
names(S93)[names(S93) == "b3.S93"] <- "b"
names(S93)[names(S93) == "c3.S93"] <- "c"
names(S93)[names(S93) == "d3.S93"] <- "d"

names(S94)[names(S94) == "a3.S94"] <- "a"
```

```
names(S94)[names(S94) == "b3.S94"] <- "b"
names(S94)[names(S94) == "c3.S94"] <- "c"
names(S94)[names(S94) == "d3.S94"] <- "d"

names(S95)[names(S95) == "a3.S95"] <- "a"
names(S95)[names(S95) == "b3.S95"] <- "b"
names(S95)[names(S95) == "c3.S95"] <- "c"
names(S95)[names(S95) == "d3.S95"] <- "d"

names(S96)[names(S96) == "a3.S96"] <- "a"
names(S96)[names(S96) == "b3.S96"] <- "b"
names(S96)[names(S96) == "c3.S96"] <- "c"
names(S96)[names(S96) == "d3.S96"] <- "d"

names(S97)[names(S97) == "a3.S97"] <- "a"
names(S97)[names(S97) == "b3.S97"] <- "b"
names(S97)[names(S97) == "c3.S97"] <- "c"
names(S97)[names(S97) == "d3.S97"] <- "d"

names(S98)[names(S98) == "a3.S98"] <- "a"
names(S98)[names(S98) == "b3.S98"] <- "b"
names(S98)[names(S98) == "c3.S98"] <- "c"
names(S98)[names(S98) == "d3.S98"] <- "d"

names(S99)[names(S99) == "a3.S99"] <- "a"
names(S99)[names(S99) == "b3.S99"] <- "b"
names(S99)[names(S99) == "c3.S99"] <- "c"
names(S99)[names(S99) == "d3.S99"] <- "d"
```

```
names(S910)[names(S910) == "a3.S910"] <- "a"
names(S910)[names(S910) == "b3.S910"] <- "b"
names(S910)[names(S910) == "c3.S910"] <- "c"
names(S910)[names(S910) == "d3.S910"] <- "d"

names(S101)[names(S101) == "a3.S101"] <- "a"
names(S101)[names(S101) == "b3.S101"] <- "b"
names(S101)[names(S101) == "c3.S101"] <- "c"
names(S101)[names(S101) == "d3.S101"] <- "d"

names(S102)[names(S102) == "a3.S102"] <- "a"
names(S102)[names(S102) == "b3.S102"] <- "b"
names(S102)[names(S102) == "c3.S102"] <- "c"
names(S102)[names(S102) == "d3.S102"] <- "d"

names(S103)[names(S103) == "a3.S103"] <- "a"
names(S103)[names(S103) == "b3.S103"] <- "b"
names(S103)[names(S103) == "c3.S103"] <- "c"
names(S103)[names(S103) == "d3.S103"] <- "d"

names(S104)[names(S104) == "a3.S104"] <- "a"
names(S104)[names(S104) == "b3.S104"] <- "b"
names(S104)[names(S104) == "c3.S104"] <- "c"
names(S104)[names(S104) == "d3.S104"] <- "d"

names(S105)[names(S105) == "a3.S105"] <- "a"
names(S105)[names(S105) == "b3.S105"] <- "b"
names(S105)[names(S105) == "c3.S105"] <- "c"
names(S105)[names(S105) == "d3.S105"] <- "d"
```

```
names(S106)[names(S106) == "a3.S106"] <- "a"
names(S106)[names(S106) == "b3.S106"] <- "b"
names(S106)[names(S106) == "c3.S106"] <- "c"
names(S106)[names(S106) == "d3.S106"] <- "d"

names(S107)[names(S107) == "a3.S107"] <- "a"
names(S107)[names(S107) == "b3.S107"] <- "b"
names(S107)[names(S107) == "c3.S107"] <- "c"
names(S107)[names(S107) == "d3.S107"] <- "d"

names(S108)[names(S108) == "a3.S108"] <- "a"
names(S108)[names(S108) == "b3.S108"] <- "b"
names(S108)[names(S108) == "c3.S108"] <- "c"
names(S108)[names(S108) == "d3.S108"] <- "d"

names(S109)[names(S109) == "a3.S109"] <- "a"
names(S109)[names(S109) == "b3.S109"] <- "b"
names(S109)[names(S109) == "c3.S109"] <- "c"
names(S109)[names(S109) == "d3.S109"] <- "d"

names(S1010)[names(S1010) == "a3.S1010"] <- "a"
names(S1010)[names(S1010) == "b3.S1010"] <- "b"
names(S1010)[names(S1010) == "c3.S1010"] <- "c"
names(S1010)[names(S1010) == "d3.S1010"] <- "d"


sij.saham=rbind.data.frame(s11,s12,s13,s14,s15,S16,S17,S18,S19,S110,S22,
                           S23,S24,S25,S26,S27,S28,S29,S210,S33,S34,
```

```
                S35,S36,S37,S38,S39,S310,S44,S45,S46,
                S47,S48,S49,S410,S55,S56,S57,S58,
                S59,S510,S66,S67,S68,S69,S610,
                S77,S78,S79,S710,S88,S89,S810,S99,S910,S1010)

row.names(sij.saham)=c("S11","S12=s21","S13=s31","S14=S41","S15=S51","S16=S61",
                "S17=S71","S18=S81","S19=S91","S110=S101","S22","S23=S32"
                ,"S24=S24","S25=S52","S26=S62","S27=S72","S28=S82",
                "S29=S92","S210=S102","S33","S34=S43","S35=S53","S36=S63"
                ,"S37=S73","S38=S83","S39=S93","S310=S103","S44",
                "S45=S54","S46=S64","S47=S74","S48=S84","S49=S94",
                "S410=S104","S55","S56=S65","S57=S75","S58=S85","S59=S95"
                ,"S510=S105","S66","S67=S76","S68=S86","S69=S96"
                ,"S610=S106","S77","S78=S87","S79=S97","S710=S107","S88",
                "S89=S98","S810=S108","S99","S910=S109","S1010")
ri.saham
sij.saham
```