********** TABEL ACUAN PROGRAM **********

Tabel Data Saham

No	Jenis Saham	H.Awal	H.Akhir	Rata-rata
1	KYOTO	12500	13700	0.0095
2	AQUA	14000	10500	0.0950
3	BATA	12200	11800	0.0033
4	NIKKEI	11950	11950	-0.0571
5	TKIM	10500	10500	0.0558
6	HMSP	13100	14000	-0.0100
7	INCO	15050	14650	-0.0116
8	ZEBR	12000	25000	0.0042
9	DYSD	9900	9900	0.6775
10	ISAT	7850	8400	0.0158
11	BRPT	4300	4600	-0.0379
12	CNDE	7400	8000	-0.0083
13	JPFA	8950	9100	-0.0304
14	MDRN	975	950	-0.0633
15	PBRX	1400	1600	0.0233
16	SCPI	2800	27250	0.0031
17	YTAR	6150	6150	0.0125
18	HANGSENG	130	150	-0.1262
19	NIPS	550	650	-0.0250
20	RIGS	1300	1700	0.0308
21	SQBI	2350	1300	-0.0177
22	UMPR	575	4750	-0.0900
23	JWTA	285	260	-0.0500
24	ILYB	12400	13000	0.0480

********** LISTING PROGRAM **********

```
Dim a As Integer

'==========  validasi inputan Pc dan Pm =============

Private Sub cmbpc_Change()
   On Error Resume Next
   If cmbpc.Text > 1 Then
      MsgBox "Anda menginputkan nilai Pc diluar range"
   End If
End Sub

Private Sub cmbpm_Change()
On Error Resume Next
If cmbpc.Text > 0.5 Then
      MsgBox "Anda menginputkan nilai Pm diluar range"
   End If
End Sub

'==========  validasi inputan saham =============


Private Sub cmbsaham1_Click()
   If cmbsaham1.Text = "10 %" Then
      w1.Text = 0.1
   ElseIf cmbsaham1.Text = "20 %" Then
      w1.Text = 0.2
   ElseIf cmbsaham1.Text = "30 %" Then
      w1.Text = 0.3
   ElseIf cmbsaham1.Text = "40 %" Then
      w1.Text = 0.4
   ElseIf cmbsaham1.Text = "50 %" Then
      w1.Text = 0.5
   ElseIf cmbsaham1.Text = "60 %" Then
      w1.Text = 0.6
   ElseIf cmbsaham1.Text = "70 %" Then
      w1.Text = 0.7
   ElseIf cmbsaham1.Text = "80 %" Then
      w1.Text = 0.8
   ElseIf cmbsaham1.Text = "90 %" Then
      w1.Text = 0.9
   ElseIf cmbsaham1.Text = "100 %" Then
      w1.Text = 1
   End If
   If Val(w1.Text) + Val(w2.Text) + Val(w3.Text) + Val(w4.Text) + Val(w5.Text) > 1
Then
```

```
      MsgBox "Jumlah total saham yang Anda inputkan keseluruhan lebih besar dari
100%", vbCritical, "Peringatan"
   End If
End Sub

Private Sub cmbsaham2_Click()
 If cmbsaham2.Text = "10 %" Then
      w2.Text = 0.1
   ElseIf cmbsaham2.Text = "20 %" Then
      w2.Text = 0.2
   ElseIf cmbsaham2.Text = "30 %" Then
      w2.Text = 0.3
   ElseIf cmbsaham2.Text = "40 %" Then
      w2.Text = 0.4
   ElseIf cmbsaham2.Text = "50 %" Then
      w2.Text = 0.5
   ElseIf cmbsaham2.Text = "60 %" Then
      w2.Text = 0.6
   ElseIf cmbsaham2.Text = "70 %" Then
      w2.Text = 0.7
   ElseIf cmbsaham2.Text = "80 %" Then
      w2.Text = 0.8
   ElseIf cmbsaham2.Text = "90 %" Then
      w2.Text = 0.9
   ElseIf cmbsaham2.Text = "100 %" Then
      w2.Text = 1
   End If
   If Val(w1.Text) + Val(w2.Text) + Val(w3.Text) + Val(w4.Text) + Val(w5.Text) > 1
Then
      MsgBox "Jumlah total saham yang Anda inputkan keseluruhan lebih besar dari
100%", vbCritical, "Peringatan"
   End If
End Sub

Private Sub cmbsaham3_Click()
If cmbsaham3.Text = "10 %" Then
      w3.Text = 0.1
   ElseIf cmbsaham3.Text = "20 %" Then
      w3.Text = 0.2
   ElseIf cmbsaham3.Text = "30 %" Then
      w3.Text = 0.3
   ElseIf cmbsaham3.Text = "40 %" Then
      w3.Text = 0.4
   ElseIf cmbsaham3.Text = "50 %" Then
      w3.Text = 0.5
   ElseIf cmbsaham3.Text = "60 %" Then
      w3.Text = 0.6
   ElseIf cmbsaham3.Text = "70 %" Then
      w3.Text = 0.7
   ElseIf cmbsaham3.Text = "80 %" Then
```

```
    w3.Text = 0.8
  ElseIf cmbsaham3.Text = "90 %" Then
    w3.Text = 0.9
  ElseIf cmbsaham3.Text = "100 %" Then
    w3.Text = 1
  End If
  If Val(w1.Text) + Val(w2.Text) + Val(w3.Text) + Val(w4.Text) + Val(w5.Text) > 1
Then
    MsgBox "Jumlah total saham yang Anda inputkan keseluruhan lebih besar dari
100%", vbCritical, "Peringatan"
  End If
End Sub

Private Sub cmbsaham4_Click()
If cmbsaham4.Text = "10 %" Then
    w4.Text = 0.1
  ElseIf cmbsaham4.Text = "20 %" Then
    w4.Text = 0.2
  ElseIf cmbsaham4.Text = "30 %" Then
    w4.Text = 0.3
  ElseIf cmbsaham4.Text = "40 %" Then
    w4.Text = 0.4
  ElseIf cmbsaham4.Text = "50 %" Then
    w4.Text = 0.5
  ElseIf cmbsaham4.Text = "60 %" Then
    w4.Text = 0.6
  ElseIf cmbsaham4.Text = "70 %" Then
    w4.Text = 0.7
  ElseIf cmbsaham4.Text = "80 %" Then
    w4.Text = 0.8
  ElseIf cmbsaham4.Text = "90 %" Then
    w4.Text = 0.9
  ElseIf cmbsaham4.Text = "100 %" Then
    w4.Text = 1
  End If
  If Val(w1.Text) + Val(w2.Text) + Val(w3.Text) + Val(w4.Text) + Val(w5.Text) > 1
Then
    MsgBox "Jumlah total saham yang Anda inputkan keseluruhan lebih besar dari
100%", vbCritical, "Peringatan"
  End If
End Sub

Private Sub cmbsaham5_Click()
If cmbsaham5.Text = "10 %" Then
    w5.Text = 0.1
  ElseIf cmbsaham5.Text = "20 %" Then
    w5.Text = 0.2
  ElseIf cmbsaham5.Text = "30 %" Then
    w5.Text = 0.3
  ElseIf cmbsaham5.Text = "40 %" Then
```

```
    w5.Text = 0.4
  ElseIf cmbsaham5.Text = "50 %" Then
    w5.Text = 0.5
  ElseIf cmbsaham5.Text = "60 %" Then
    w5.Text = 0.6
  ElseIf cmbsaham5.Text = "70 %" Then
    w5.Text = 0.7
  ElseIf cmbsaham5.Text = "80 %" Then
    w5.Text = 0.8
  ElseIf cmbsaham5.Text = "90 %" Then
    w5.Text = 0.9
  ElseIf cmbsaham5.Text = "100 %" Then
    w5.Text = 1
  End If
  If Val(w1.Text) + Val(w2.Text) + Val(w3.Text) + Val(w4.Text) + Val(w5.Text) > 1
Then
    MsgBox "Jumlah total saham yang Anda inputkan keseluruhan lebih besar dari
100%", vbCritical, "Peringatan"
  End If
End Sub

'==========  acak populasi(inisialisasi)  =============


Private Sub cmdacakbaru_Click()
  s1.Text = Format((Rnd * 1), "0.000")
  s2.Text = Format((Rnd * 1), "0.000")
  s3.Text = Format((Rnd * 1), "0.000")
  s4.Text = Format((Rnd * 1), "0.000")
  s5.Text = Format((Rnd * 1), "0.000")
  s6.Text = Format((Rnd * 1), "0.000")
  s7.Text = Format((Rnd * 1), "0.000")
  s8.Text = Format((Rnd * 1), "0.000")
  s9.Text = Format((Rnd * 1), "0.000")
  s10.Text = Format((Rnd * 1), "0.000")
End Sub

Private Sub cmdacakcros_Click()
  cr1.Text = Format((Rnd * 1), "0.000")
  cr2.Text = Format((Rnd * 1), "0.000")
  cr3.Text = Format((Rnd * 1), "0.000")
  cr4.Text = Format((Rnd * 1), "0.000")
  cr5.Text = Format((Rnd * 1), "0.000")
  cr6.Text = Format((Rnd * 1), "0.000")
  cr7.Text = Format((Rnd * 1), "0.000")
  cr8.Text = Format((Rnd * 1), "0.000")
  cr9.Text = Format((Rnd * 1), "0.000")
  cr10.Text = Format((Rnd * 1), "0.000")

  '==========  bandingkan nilai random dgn pc =============
```

```
   If Val(cr1.Text) < Val(cmbpc.Text) Then
      txtcross1.Text = Mid(Text1.Text, 1, 30)
   End If
   If Val(cr2.Text) < Val(cmbpc.Text) Then
      txtcross1.Text = Mid(Text2.Text, 1, 30)
   End If
   If Val(cr3.Text) < Val(cmbpc.Text) Then
      txtcross1.Text = Mid(Text3.Text, 1, 30)
   End If
   If Val(cr4.Text) < Val(cmbpc.Text) Then
      txtcross1.Text = Mid(Text4.Text, 1, 30)
   End If
   If Val(cr5.Text) < Val(cmbpc.Text) Then
      txtcross1.Text = Mid(Text5.Text, 1, 30)
   End If
   If Val(cr6.Text) < Val(cmbpc.Text) Then
      txtcross1.Text = Mid(Text6.Text, 1, 30)
   End If
   If Val(cr7.Text) < Val(cmbpc.Text) Then
      txtcross1.Text = Mid(Text7.Text, 1, 30)
   End If
   If Val(cr8.Text) < Val(cmbpc.Text) Then
      txtcross1.Text = Mid(Text8.Text, 1, 30)
   End If
   If Val(cr9.Text) < Val(cmbpc.Text) Then
      txtcross1.Text = Mid(Text9.Text, 1, 30)
   End If
   If Val(cr10.Text) < Val(cmbpc.Text) Then
      txtcross1.Text = Mid(Text10.Text, 1, 30)
   End If

   tc1.Text = Mid(txtcross1.Text, 20, 6)
   tc2.Text = Mid(txtcross1.Text, 27, 6)
   tc3.Text = Mid(txtcross1.Text, 1, 6)
   tc4.Text = Mid(txtcross1.Text, 6, 6)
   tc5.Text = Mid(txtcross1.Text, 13, 6)
   txtcross2.Text = "" & Val(tc1.Text) & "     " & Val(tc2.Text) & "     " & Val(tc3.Text)
& "     " & Val(tc4.Text) & "     " & Val(tc5.Text)

'==========  proses crossover  ===========

tes1.Text = Mid(txtcross1.Text, 1, 6)
tes2.Text = Mid(txtcross1.Text, 7, 6)
tes3.Text = Mid(txtcross1.Text, 14, 6)
tes4.Text = Mid(txtcross1.Text, 20, 6)
tes5.Text = Mid(txtcross1.Text, 26, 6)

'temp$ = Val(tc2.Text)
'tc2.Text = Val(tes2.Text)
```

```
'tes2.Text = temp$

'temp$ = Val(tc3.Text)
'tc3.Text = Val(tes3.Text)
'tes3.Text = temp$

'temp$ = Val(tc4.Text)
'tc4.Text = Val(tes4.Text)
'tes4.Text = temp$

'txtcross1.Text = Val(tes1.Text) & "     " & Val(tes2.Text) & "     " & Val(tes3.Text) & "
" & Val(tes4.Text) & "     " & Val(tes5.Text)
'txtcross2.Text = Val(tc1.Text) & "     " & Val(tc2.Text) & "     " & Val(tc3.Text) & "     "
& Val(tc4.Text) & "     " & Val(tc5.Text)

End Sub

Private Sub cmdhasil_Click()
   MsgBox "Saham terbaik bagi investasi Anda adalah saham nomor " & txtcross1.Text
End Sub

Private Sub cmdhitnilaiC_Click()
   For I = 1 To 24
      cmdnilaiC_Click
   Next I
End Sub

'==========  validasi jika inputan total saham < 100 % =======


Private Sub cmdHitung_Click()
   Text12.Text = Val(w1) + Val(w2) + Val(w3) + Val(w4) + Val(w5)
   On Error GoTo cegat
   If Val(Text12.Text) < 1 Then
      MsgBox "Anda baru menginputkan saham sebesar " & Val(Text12.Text) * 100 &
"%, proses tidak dapat dilanjutkan."
   Else
   If cmbpm.Text = "" Then
      MsgBox "Anda lupa mengisi nilai Pm", vbCritical, "Error"
      Exit Sub
   End If
   For a = 1 To Val(txtgenerasi.Text)
   List1.AddItem "Generasi ke " & a
   acak1
   acak2
   acak3
   acak4
   acak5
   acak6
   acak7
```

```
    acak8
    acak9
    acak10

        cmdhitnilaiC_Click
        cmdpitnes_Click
        cmdacakbaru_Click
        cmdprosesbanding_Click
        cmdacakcros_Click
        Mapping
    Next a
    SSTab1.Tab = 1
    End If
cegat:
    Exit Sub
End Sub

'==========  mencari nilai fitness  ==============


Private Sub cmdpitnes_Click()

     fit1 = (Val(txtrata_rata.Text) * Val(w1.Text)) / Sqr(Val(c1.Text) * Val(w1.Text))
    txtfc1.Text = Format(fit1, "0.0000000")

    fit2 = (Val(txtrata_rata.Text) * Val(w2.Text)) / Sqr(Val(c2.Text) * Val(w2.Text))
    txtfc2.Text = Format(fit2, "0.0000000")

    fit3 = (Val(txtrata_rata.Text) * Val(w3.Text)) / Sqr(Val(c3.Text) * Val(w3.Text))
    txtfc3.Text = Format(fit3, "0.0000000")

    fit4 = (Val(txtrata_rata.Text) * Val(w4.Text)) / Sqr(Val(c4.Text) * Val(w4.Text))
    txtfc4.Text = Format(fit4, "0.0000000")

    fit5 = (Val(txtrata_rata.Text) * Val(w5.Text)) / Sqr(Val(c5.Text) * Val(w5.Text))
    txtfc5.Text = Format(fit5, "0.0000000")

    fit6 = (Val(txtrata_rata.Text) * Val(w1.Text)) / Sqr(Val(c6.Text) * Val(w1.Text))
    txtfc6.Text = Format(fit6, "0.0000000")

    fit7 = (Val(txtrata_rata.Text) * Val(w2.Text)) / Sqr(Val(c7.Text) * Val(w2.Text))
    txtfc7.Text = Format(fit7, "0.0000000")

    fit8 = (Val(txtrata_rata.Text) * Val(w3.Text)) / Sqr(Val(c8.Text) * Val(w3.Text))
    txtfc8.Text = Format(fit8, "0.0000000")

    fit9 = (Val(txtrata_rata.Text) * Val(w4.Text)) / Sqr(Val(c9.Text) * Val(w4.Text))
    txtfc9.Text = Format(fit9, "0.0000000")

    fit10 = (Val(txtrata_rata.Text) * Val(w5.Text)) / Sqr(Val(c10.Text) * Val(w5.Text))
```

```
    txtfc10.Text = Format(fit10, "0.0000000")

    fit11 = (Val(txtrata_rata.Text) * Val(w1.Text)) / Sqr(Val(c11.Text) * Val(w1.Text))
    txtfc11.Text = Format(fit11, "0.0000000")

    fit12 = (Val(txtrata_rata.Text) * Val(w2.Text)) / Sqr(Val(c12.Text) * Val(w2.Text))
    txtfc12.Text = Format(fit12, "0.0000000")

    fit13 = (Val(txtrata_rata.Text) * Val(w3.Text)) / Sqr(Val(c13.Text) * Val(w3.Text))
    txtfc13.Text = Format(fit13, "0.0000000")

    fit14 = (Val(txtrata_rata.Text) * Val(w4.Text)) / Sqr(Val(c14.Text) * Val(w4.Text))
    txtfc14.Text = Format(fit14, "0.0000000")

    fit15 = (Val(txtrata_rata.Text) * Val(w5.Text)) / Sqr(Val(c15.Text) * Val(w5.Text))
    txtfc15.Text = Format(fit15, "0.0000000")

    fit16 = (Val(txtrata_rata.Text) * Val(w1.Text)) / Sqr(Val(c16.Text) * Val(w1.Text))
    txtfc16.Text = Format(fit16, "0.0000000")

    fit17 = (Val(txtrata_rata.Text) * Val(w2.Text)) / Sqr(Val(c17.Text) * Val(w2.Text))
    txtfc17.Text = Format(fit17, "0.0000000")

    fit18 = (Val(txtrata_rata.Text) * Val(w3.Text)) / Sqr(Val(c18.Text) * Val(w3.Text))
    txtfc18.Text = Format(fit1, "0.0000000")

    fit19 = (Val(txtrata_rata.Text) * Val(w4.Text)) / Sqr(Val(c19.Text) * Val(w4.Text))
    txtfc19.Text = Format(fit19, "0.0000000")

    fit20 = (Val(txtrata_rata.Text) * Val(w5.Text)) / Sqr(Val(c20.Text) * Val(w5.Text))
    txtfc20.Text = Format(fit20, "0.0000000")

    fit21 = (Val(txtrata_rata.Text) * Val(w1.Text)) / Sqr(Val(c21.Text) * Val(w1.Text))
    txtfc21.Text = Format(fit21, "0.0000000")

    fit22 = (Val(txtrata_rata.Text) * Val(w2.Text)) / Sqr(Val(c22.Text) * Val(w2.Text))
    txtfc22.Text = Format(fit22, "0.0000000")

    fit23 = (Val(txtrata_rata.Text) * Val(w3.Text)) / Sqr(Val(c23.Text) * Val(w3.Text))
    txtfc23.Text = Format(fit23, "0.0000000")

    fit24 = (Val(txtrata_rata.Text) * Val(w4.Text)) / Sqr(Val(c24.Text) * Val(w4.Text))
    txtfc24.Text = Format(fit24, "0.0000000")

'============= mencari nilai total fitness =============

    txttotpitnes.Text = fit1 + fit2 + fit3 + fit4 + fit5 + fit6 + fit7 + fit8 + fit9 + fit10 + fit11
+ fit12 + fit13 + fit14 + fit15 + fit16 + fit17 + fit18 + fit19 + fit20 + fit21 + fit22 + fit23 +
fit24
```

```
'============= mencari nilai pk ========

    Pk1.Text = Val(txtfc1.Text) / Val(txttotpitnes.Text)
    Pk2.Text = Val(txtfc2.Text) / Val(txttotpitnes.Text)
    Pk3.Text = Val(txtfc3.Text) / Val(txttotpitnes.Text)
    Pk4.Text = Val(txtfc4.Text) / Val(txttotpitnes.Text)
    Pk5.Text = Val(txtfc5.Text) / Val(txttotpitnes.Text)
    Pk6.Text = Val(txtfc6.Text) / Val(txttotpitnes.Text)
    Pk7.Text = Val(txtfc7.Text) / Val(txttotpitnes.Text)
    Pk8.Text = Val(txtfc8.Text) / Val(txttotpitnes.Text)
    Pk9.Text = Val(txtfc9.Text) / Val(txttotpitnes.Text)
    Pk10.Text = Val(txtfc10.Text) / Val(txttotpitnes.Text)
    Pk11.Text = Val(txtfc11.Text) / Val(txttotpitnes.Text)
    Pk12.Text = Val(txtfc12.Text) / Val(txttotpitnes.Text)
    Pk13.Text = Val(txtfc13.Text) / Val(txttotpitnes.Text)
    Pk14.Text = Val(txtfc14.Text) / Val(txttotpitnes.Text)
    Pk15.Text = Val(txtfc15.Text) / Val(txttotpitnes.Text)
    Pk16.Text = Val(txtfc16.Text) / Val(txttotpitnes.Text)
    Pk17.Text = Val(txtfc17.Text) / Val(txttotpitnes.Text)
    Pk18.Text = Val(txtfc18.Text) / Val(txttotpitnes.Text)
    Pk19.Text = Val(txtfc19.Text) / Val(txttotpitnes.Text)
    Pk20.Text = Val(txtfc20.Text) / Val(txttotpitnes.Text)
    Pk21.Text = Val(txtfc21.Text) / Val(txttotpitnes.Text)
    Pk22.Text = Val(txtfc22.Text) / Val(txttotpitnes.Text)
    Pk23.Text = Val(txtfc23.Text) / Val(txttotpitnes.Text)
    Pk24.Text = Val(txtfc24.Text) / Val(txttotpitnes.Text)

'============== mencari nilai qk ==============
    Qk1.Text = Pk1.Text
    Qk2.Text = Val(Pk1.Text) + Val(Pk2.Text)
    Qk3.Text = Val(Qk2.Text) + Val(Pk3.Text)
    Qk4.Text = Val(Qk3.Text) + Val(Pk4.Text)
    Qk5.Text = Val(Qk4.Text) + Val(Pk5.Text)
    Qk6.Text = Val(Qk5.Text) + Val(Pk6.Text)
    Qk7.Text = Val(Qk6.Text) + Val(Pk7.Text)
    Qk8.Text = Val(Qk7.Text) + Val(Pk8.Text)
    Qk9.Text = Val(Qk8.Text) + Val(Pk9.Text)
    Qk10.Text = Val(Qk9.Text) + Val(Pk10.Text)
    Qk11.Text = Val(Qk10.Text) + Val(Pk11.Text)
    Qk12.Text = Val(Qk11.Text) + Val(Pk12.Text)
    Qk13.Text = Val(Qk12.Text) + Val(Pk13.Text)
    Qk14.Text = Val(Qk13.Text) + Val(Pk14.Text)
    Qk15.Text = Val(Qk14.Text) + Val(Pk15.Text)
    Qk16.Text = Val(Qk15.Text) + Val(Pk16.Text)
    Qk17.Text = Val(Qk16.Text) + Val(Pk17.Text)
    Qk18.Text = Val(Qk17.Text) + Val(Pk18.Text)
    Qk19.Text = Val(Qk18.Text) + Val(Pk19.Text)
    Qk20.Text = Val(Qk19.Text) + Val(Pk20.Text)
    Qk21.Text = Val(Qk20.Text) + Val(Pk21.Text)
    Qk22.Text = Val(Qk21.Text) + Val(Pk22.Text)
```

```
    Qk23.Text = Val(Qk22.Text) + Val(Pk23.Text)
    Qk24.Text = Val(Qk23.Text) + Val(Pk24.Text)

End Sub

'==========  menentukan range dalam qk untuk menghasilkan populasi baru
=============


Private Sub cmdprosesbanding_Click()
    Dim temp1, temp2, temp3, temp4, temp5, temp6, temp7, temp8, temp9, temp10 As
String
    If Val(s1.Text) < Val(Qk3.Text) Then
        h1.Text = Qk3.Text
        space1.Text = 1
        Text1.Text = Text1.Text
    ElseIf Val(s1.Text) < Val(Qk6.Text) Then
        h1.Text = Qk6.Text
        space2.Text = 2
        temp1 = Text2.Text
        Text2.Text = Text1.Text
        Text1.Text = temp1
    ElseIf Val(s1.Text) < Val(Qk8.Text) Then
        h1.Text = Qk8.Text
        space3.Text = 3
        temp2 = Text3.Text
        Text3.Text = Text1.Text
        Text1.Text = temp2
    ElseIf Val(s1.Text) < Val(Qk10.Text) Then
        h1.Text = Qk10.Text
        space4.Text = 4
        temp3 = Text4.Text
        Text4.Text = Text1.Text
        Text1.Text = temp3
    ElseIf Val(s1.Text) < Val(Qk12.Text) Then
        h1.Text = Qk12.Text
        space5.Text = 5
        temp4 = Text5.Text
        Text5.Text = Text1.Text
        Text1.Text = temp4
    ElseIf Val(s1.Text) < Val(Qk14.Text) Then
        h1.Text = Qk14.Text
        space6.Text = 6
        temp5 = Text6.Text
        Text6.Text = Text1.Text
        Text1.Text = temp5
     ElseIf Val(s1.Text) < Val(Qk16.Text) Then
        h1.Text = Qk16.Text
        space7.Text = 7
        temp6 = Text7.Text
```

```
    Text7.Text = Text1.Text
    Text1.Text = temp6
    Text10.Text = temp1
ElseIf Val(s10.Text) < Val(Qk6.Text) Then
    h10.Text = Qk6.Text
    space2.Text = 2
     temp2 = Text2.Text
    Text2.Text = Text10.Text
    Text10.Text = temp2
ElseIf Val(s10.Text) < Val(Qk8.Text) Then
    h10.Text = Qk8.Text
    space3.Text = 3
     temp3 = Text3.Text
    Text3.Text = Text10.Text
    Text10.Text = temp3
ElseIf Val(s10.Text) < Val(Qk10.Text) Then
    h10.Text = Qk10.Text
    space4.Text = 4
     temp4 = Text4.Text
    Text4.Text = Text10.Text
    Text10.Text = temp4
ElseIf Val(s10.Text) < Val(Qk12.Text) Then
    h10.Text = Qk12.Text
    space5.Text = 5
     temp5 = Text5.Text
    Text5.Text = Text10.Text
    Text10.Text = temp5
ElseIf Val(s10.Text) < Val(Qk14.Text) Then
    h10.Text = Qk14.Text
    space6.Text = 6
     temp6 = Text6.Text
    Text6.Text = Text10.Text
    Text10.Text = temp6
 ElseIf Val(s10.Text) < Val(Qk16.Text) Then
    h10.Text = Qk16.Text
    space7.Text = 7
     temp7 = Text7.Text
    Text7.Text = Text10.Text
    Text10.Text = temp7
 ElseIf Val(s10.Text) < Val(Qk18.Text) Then
    h10.Text = Qk18.Text
    space8.Text = 8
     temp8 = Text8.Text
    Text8.Text = Text10.Text
    Text10.Text = temp8
 ElseIf Val(s10.Text) < Val(Qk21.Text) Then
    h10.Text = Qk21.Text
    space9.Text = 9
     temp9 = Text9.Text
    Text9.Text = Text10.Text
```

```
      Text10.Text = temp9
    ElseIf Val(s10.Text) < Val(Qk24.Text) Then
      h10.Text = Qk24.Text
      space10.Text = 10
      Text10.Text = Text10.Text
   End If
   '===========  menampilkan populasi baru  ===========

   'For y = 1 To Val(txtgenerasi.Text)
   List2.AddItem "Generasi ke " & a
   List2.AddItem Text1.Text
   List2.AddItem Text2.Text
   List2.AddItem Text3.Text
   List2.AddItem Text4.Text
   List2.AddItem Text5.Text
   List2.AddItem Text6.Text
   List2.AddItem Text7.Text
   List2.AddItem Text8.Text
   List2.AddItem Text9.Text
   List2.AddItem Text10.Text
   'Next y
End Sub

Private Sub Command1_Click()
   frmgrid.Show
End Sub

'==========  mencari nilai r  =============


Private Sub Command2_Click()
   hasil$ = (txtHarga_Akhir - txtharga_awal) / txtharga_awal
   txtrata_rata.Text = Format(hasil$, "0.000")
   Label4.Caption = txtjenis_Saham.Text & " Rate of Return "

End Sub

Private Sub Command3_Click()
Text12.Text = Val(w1) + Val(w2) + Val(w3) + Val(w4) + Val(w5)
If Val(Text12.Text) < 1 Then
   MsgBox "Anda baru menginputkan saham sebesar " & Val(Text12.Text) * 100 & "%"
End If
End Sub

'==========  mencari nilai C  =============

Public Function nilai_C()
Dim hasil_C As Double
hasil_C = (Val(txtrata_rata) - Val(Text11)) * (Val(txtrata_rata) - Val(Text11))
End Function
```

```
Private Sub cmdnilaiC_Click()
If cmdnilaiC.Caption = "Nilai C1" Then
   c1.Text = (Val(txtrata_rata) - Val(Text11)) * (Val(txtrata_rata) - Val(Text11))
   Adodc2.Recordset.MoveNext
   cmdnilaiC.Caption = "Nilai C2"
ElseIf cmdnilaiC.Caption = "Nilai C2" Then
   c2.Text = (Val(txtrata_rata) - Val(Text11)) * (Val(txtrata_rata) - Val(Text11))
   Adodc2.Recordset.MoveNext
   cmdnilaiC.Caption = "Nilai C3"
ElseIf cmdnilaiC.Caption = "Nilai C3" Then
   c3.Text = (Val(txtrata_rata) - Val(Text11)) * (Val(txtrata_rata) - Val(Text11))
   Adodc2.Recordset.MoveNext
   cmdnilaiC.Caption = "Nilai C4"
ElseIf cmdnilaiC.Caption = "Nilai C4" Then
   c4.Text = (Val(txtrata_rata) - Val(Text11)) * (Val(txtrata_rata) - Val(Text11))
   Adodc2.Recordset.MoveNext
   cmdnilaiC.Caption = "Nilai C5"
ElseIf cmdnilaiC.Caption = "Nilai C5" Then
   c5.Text = (Val(txtrata_rata) - Val(Text11)) * (Val(txtrata_rata) - Val(Text11))
   Adodc2.Recordset.MoveNext
   cmdnilaiC.Caption = "Nilai C6"
ElseIf cmdnilaiC.Caption = "Nilai C6" Then
   c6.Text = (Val(txtrata_rata) - Val(Text11)) * (Val(txtrata_rata) - Val(Text11))

ElseIf cmdnilaiC.Caption = "Nilai C22" Then
   c22.Text = (Val(txtrata_rata) - Val(Text11)) * (Val(txtrata_rata) - Val(Text11))
   Adodc2.Recordset.MoveNext
   cmdnilaiC.Caption = "Nilai C23"
ElseIf cmdnilaiC.Caption = "Nilai C23" Then
   c23.Text = (Val(txtrata_rata) - Val(Text11)) * (Val(txtrata_rata) - Val(Text11))
   Adodc2.Recordset.MoveNext
   cmdnilaiC.Caption = "Nilai C24"
ElseIf cmdnilaiC.Caption = "Nilai C24" Then
   c24.Text = (Val(txtrata_rata) - Val(Text11)) * (Val(txtrata_rata) - Val(Text11))
End If
End Sub

Private Sub Command4_Click()
   Dim I As Integer
   Dim down As Integer
   Dim across As Integer
   Frame1.Visible = False
   SSTab1.Visible = False

   DrawWidth = 4
   For I = 1 To 16000
      down = down + 1
      across = across + 1
      PSet (Rnd * across, Rnd * down), QBColor(Rnd * 15)
```

```
   Next I
   End
End Sub

'============ proses acak data saham =============

Private Sub Mapping()
   On Error GoTo salah
   ReDim Number(1 To cutvalue.Text) As Integer
   Dim I As Integer, n As Integer, temp As Integer
   Randomize       ' seed random number generator
   I = 1
   Do
      temp = Int(Rnd(1) * ((cutmax.Text - cutmin.Text) + 1) + cutmin.Text)
      If I = 1 Then  ' don't test if first number (will be = to itself)
         Number(I) = temp
         I = I + 1
      Else
         For n = 1 To I - 1
            If Number(n) = temp Then   ' check all numbers for duplicates
               Exit For
            End If
         Next n
         If Number(n) <> temp Then      ' temp is unique
            Number(I) = temp
            I = I + 1                ' advance counter
         Else
         End If
      End If
Loop While I <= cutvalue.Text       ' repeat until you have enough unique numbers
For I = 1 To UBound(Number)
   m = m & "" & Number(I) & " "
Next I
tempoint.Text = m
cutpoint1.Text = Mid(m, 1, 1)
cutpoint2.Text = Mid(m, 3, 1)
If Val(cutpoint1.Text) > Val(cutpoint2.Text) Then
   semp$ = Val(cutpoint1.Text)
   cutpoint1.Text = Val(cutpoint2.Text)
   cutpoint2.Text = semp$
End If
'========= posisi cutpoint ========

If Val(cutpoint1.Text) = 1 Then
   p1.Text = Mid(txtcross1.Text, 1, 6)
ElseIf Val(cutpoint1.Text) = 2 Then
   p1.Text = Mid(txtcross1.Text, 7, 6)
ElseIf Val(cutpoint1.Text) = 3 Then
   p1.Text = Mid(txtcross1.Text, 13, 6)
ElseIf Val(cutpoint1.Text) = 4 Then
```

```
   p1.Text = Mid(txtcross1.Text, 19, 5)
End If
If Val(cutpoint2.Text) = 1 Then
   p2.Text = Mid(txtcross1.Text, 1, 6)
ElseIf Val(cutpoint2.Text) = 2 Then
   p2.Text = Mid(txtcross1.Text, 7, 6)
ElseIf Val(cutpoint2.Text) = 3 Then
   p2.Text = Mid(txtcross1.Text, 13, 6)
ElseIf Val(cutpoint2.Text) = 4 Then
   p2.Text = Mid(txtcross1.Text, 19, 5)
End If
If Val(cutpoint1.Text) = 1 Then
   p3.Caption = Mid(txtcross2.Text, 1, 6)
ElseIf Val(cutpoint1.Text) = 2 Then
   p3.Caption = Mid(txtcross2.Text, 7, 6)
ElseIf Val(cutpoint1.Text) = 3 Then
   p3.Caption = Mid(txtcross2.Text, 13, 6)
ElseIf Val(cutpoint1.Text) = 4 Then
   p3.Caption = Mid(txtcross2.Text, 19, 5)
End If
If Val(cutpoint2.Text) = 1 Then
   p4.Caption = Mid(txtcross2.Text, 1, 6)
ElseIf Val(cutpoint2.Text) = 2 Then
   p4.Caption = Mid(txtcross2.Text, 7, 6)
ElseIf Val(cutpoint2.Text) = 3 Then
   p4.Caption = Mid(txtcross2.Text, 13, 6)
ElseIf Val(cutpoint2.Text) = 4 Then
   p4.Caption = Mid(txtcross2.Text, 19, 5)
End If
'==================  mapping ====================

Dim map1, map2, map3, map4, map5, map6, map7, map8 As Byte
Dim temp1, temp2, temp3, temp4, temp5 As String
If Val(cutpoint1.Text) = 1 And Val(cutpoint2.Text) = 2 Then
   mp1.Text = Val(tes1.Text)
   mp2.Text = Val(tes2.Text)
   ping1.Text = Val(tc1.Text)
   ping2.Caption = Val(tc2.Text)

   temp1 = tes1.Text
   tes1.Text = tc1.Text
   tc1.Text = temp1
   temp2 = tes2.Text
   tes2.Text = tc2.Text
   tc2.Text = temp2

   If Val(tes1.Text) = Val(tes3.Text) Then
      tes3.Text = Val(ping1.Text)
   ElseIf Val(tes1.Text) = Val(tes4.Text) Then
      tes4.Text = Val(ping1.Text)
```

```
    ElseIf Val(tes1.Text) = Val(tes5.Text) Then
       tes5.Text = Val(ping1.Text)
    End If
    If Val(tes2.Text) = Val(tes3.Text) Then
       tes3.Text = Val(ping2.Caption)
    ElseIf Val(tes2.Text) = Val(tes4.Text) Then
       tes4.Text = Val(ping2.Caption)
    ElseIf Val(tes2.Text) = Val(tes5.Text) Then
       tes5.Text = Val(ping2.Caption)
    End If

    If Val(tc1.Text) = Val(tc3.Text) Then
       tc3.Text = Val(mp1.Text)
    ElseIf Val(tc1.Text) = Val(tc4.Text) Then
       tc4.Text = Val(mp1.Text)
    ElseIf Val(tc1.Text) = Val(tc5.Text) Then
       tc5.Text = Val(mp1.Text)
    End If
    If Val(tc2.Text) = Val(tc3.Text) Then
       tc3.Text = Val(mp2.Text)
    ElseIf Val(tc2.Text) = Val(tc4.Text) Then
       tc4.Text = Val(mp2.Text)
    ElseIf Val(tc2.Text) = Val(tc5.Text) Then
       tc5.Text = Val(mp2.Text)
    End If
    'tes3.Text = tes3.Text
    'temp3 = tes4.Text
    'tes4.Text = tc3.Text
    'tc3.Text = temp4
    'temp5 = tes5.Text
    'tes5.Text = tc4.Text
    'tc4.Text = temp5
    'tc5.Text = tc5.Text
ElseIf Val(cutpoint1.Text) = 1 And Val(cutpoint2.Text) = 3 Then
    mp1.Text = Val(tes1.Text)
    mp2.Text = Val(tes2.Text)
    mp3.Text = Val(tes3.Text)
    ping1.Text = Val(tc1.Text)
    ping2.Caption = Val(tc2.Text)
    ping3.Caption = Val(tc3.Text)

    temp1 = tes1.Text
    tes1.Text = tc1.Text
    tc1.Text = temp1
    temp2 = tes2.Text
    tes2.Text = tc2.Text
    tc2.Text = temp2
    temp3 = tes3.Text
    tes3.Text = tc3.Text
    tc3.Text = temp3
```

```
    If Val(tes1.Text) = Val(tes4.Text) Then
       tes4.Text = Val(ping1.Text)
    ElseIf Val(tes1.Text) = Val(tes5.Text) Then
       tes5.Text = Val(ping1.Text)
    ElseIf Val(tes2.Text) = Val(tes4.Text) Then
       tes4.Text = Val(ping2.Caption)
    ElseIf Val(tes2.Text) = Val(tes5.Text) Then
       tes5.Text = Val(ping2.Caption)
    ElseIf Val(tes3.Text) = Val(tes4.Text) Then
       tes4.Text = Val(ping3.Caption)
    ElseIf Val(tes3.Text) = Val(tes5.Text) Then
       tes5.Text = Val(ping3.Caption)
    End If

    If Val(tc1.Text) = Val(tc4.Text) Then
       tc4.Text = Val(mp1.Text)
    ElseIf Val(tc1.Text) = Val(tc5.Text) Then
       tc5.Text = Val(mp1.Text)
    ElseIf Val(tc2.Text) = Val(tes4.Text) Then
       tc4.Text = Val(mp2.Text)
    ElseIf Val(tc2.Text) = Val(tes5.Text) Then
       tc5.Text = Val(mp2.Text)
    ElseIf Val(tc3.Text) = Val(tes4.Text) Then
       tc4.Text = Val(mp3.Text)
    ElseIf Val(tc3.Text) = Val(tes5.Text) Then
       tc5.Text = Val(mp3.Text)
    End If

    'temp4 = tes4.Text
    'tes4.Text = tc5.Text
    'tc5.Text = temp4
    'temp5 = tes5.Text
    'tes5.Text = tc4.Text
    'tc4.Text = temp5
ElseIf Val(cutpoint1.Text) = 1 And Val(cutpoint2.Text) = 4 Then
    mp1.Text = Val(tes1.Text)
    mp2.Text = Val(tes2.Text)
    mp3.Text = Val(tes3.Text)
    mp4.Text = Val(tes4.Text)
    ping1.Text = Val(tc1.Text)
    ping2.Caption = Val(tc2.Text)
    ping3.Caption = Val(tc3.Text)
    ping4.Caption = Val(tc4.Text)
    temp1 = tes1.Text
    tes1.Text = tc1.Text
    tc1.Text = temp1
    temp2 = tes2.Text
    tes2.Text = tc2.Text
    tc2.Text = temp2
```

```
    temp3 = tes3.Text
    tes3.Text = tc3.Text
    tc3.Text = temp3
    temp4 = tes4.Text
    tes4.Text = tc4.Text
    tc4.Text = temp4

    If Val(tes1.Text) = Val(tes5.Text) Then
       tes5.Text = Val(ping1.Text)
    ElseIf Val(tes2.Text) = Val(tes5.Text) Then
       tes5.Text = Val(ping2.Caption)
    ElseIf Val(tes3.Text) = Val(tes5.Text) Then
       tes5.Text = Val(ping3.Caption)
    ElseIf Val(tes4.Text) = Val(tes5.Text) Then
       tes5.Text = Val(ping4.Caption)
    End If
    If Val(tc1.Text) = Val(tc5.Text) Then
       tc5.Text = Val(mp1.Text)
    ElseIf Val(tc2.Text) = Val(tc5.Text) Then
       tc5.Text = Val(mp2.Text)
    ElseIf Val(tc3.Text) = Val(tc5.Text) Then
       tc5.Text = Val(mp3.Text)
    ElseIf Val(tc4.Text) = Val(tc5.Text) Then
       tc5.Text = Val(mp4.Text)
    End If
    'temp5 = tes5.Text
    'tes5.Text = tc5.Text
    'tc5.Text = temp5
ElseIf Val(cutpoint1.Text) = 2 And Val(cutpoint2.Text) = 3 Then
    mp2.Text = Val(tes2.Text)
    mp3.Text = Val(tes3.Text)
    ping2.Caption = Val(tc2.Text)
    ping3.Caption = Val(tc3.Text)

    temp2 = tes2.Text
    tes2.Text = tc2.Text
    tc2.Text = temp2
    temp3 = tes3.Text
    tes3.Text = tc3.Text
    tc3.Text = temp3

    If Val(tes2.Text) = Val(tes1.Text) Then
       tes1.Text = Val(ping2.Caption)
    ElseIf Val(tes2.Text) = Val(tes4.Text) Then
       tes4.Text = Val(ping2.Caption)
    ElseIf Val(tes2.Text) = Val(tes5.Text) Then
       tes5.Text = Val(ping3.Caption)
    ElseIf Val(tes3.Text) = Val(tes1.Text) Then
       tes1.Text = Val(ping3.Caption)
    ElseIf Val(tes3.Text) = Val(tes4.Text) Then
```

```
      tes4.Text = Val(ping3.Caption)
    ElseIf Val(tes3.Text) = Val(tes5.Text) Then
      tes5.Text = Val(ping3.Caption)
      End If
    If Val(tc2.Text) = Val(tc1.Text) Then
      tc1.Text = Val(mp2.Text)
    ElseIf Val(tc2.Text) = Val(tc4.Text) Then
      tc4.Text = Val(mp2.Text)
    ElseIf Val(tc2.Text) = Val(tc5.Text) Then
      tc5.Text = Val(mp2.Text)
    ElseIf Val(tc3.Text) = Val(tc1.Text) Then
      tc1.Text = Val(mp3.Text)
    ElseIf Val(tc3.Text) = Val(tc4.Text) Then
      tc4.Text = Val(mp3.Text)
    ElseIf Val(tc3.Text) = Val(tc5.Text) Then
      tc5.Text = Val(mp3.Text)
    End If
    'tes2.Text = tc2.Text
    'tc2.Text = temp3
    'temp4 = tes3.Text
    'tes3.Text = tc3.Text
    'tc3.Text = temp4
    'tes4.Text = tes4.Text
    'tc1.Text = tc1.Text
  ElseIf Val(cutpoint1.Text) = 2 And Val(cutpoint2.Text) = 4 Then
    mp2.Text = Val(tes2.Text)
    mp3.Text = Val(tes3.Text)
    mp4.Text = Val(tes4.Text)
    ping2.Caption = Val(tc2.Text)
    ping3.Caption = Val(tc3.Text)
    ping4.Caption = Val(tc4.Text)
    temp2 = tes2.Text
    tes2.Text = tc2.Text
    tc2.Text = temp2
    temp3 = tes3.Text
    tes3.Text = tc3.Text
    tc3.Text = temp3
    temp4 = tes4.Text
    tes4.Text = tc4.Text
    tc4.Text = temp4

    If Val(tes2.Text) = Val(tes1.Text) Then
      tes1.Text = Val(ping2.Caption)
    ElseIf Val(tes2.Text) = Val(tes5.Text) Then
      tes5.Text = Val(ping2.Caption)
    ElseIf Val(tes3.Text) = Val(tes1.Text) Then
      tes1.Text = Val(ping3.Caption)
    ElseIf Val(tes3.Text) = Val(tes5.Text) Then
      tes5.Text = Val(ping3.Caption)
    ElseIf Val(tes4.Text) = Val(tes1.Text) Then
```

```
        tes1.Text = Val(ping4.Caption)
    ElseIf Val(tes4.Text) = Val(tes5.Text) Then
        tes5.Text = Val(ping4.Caption)
    End If
    If Val(tc2.Text) = Val(tc1.Text) Then
        tc5.Text = Val(mp2.Text)
    ElseIf Val(tc2.Text) = Val(tc5.Text) Then
        tc5.Text = Val(mp2.Text)
    ElseIf Val(tc3.Text) = Val(tc1.Text) Then
        tc1.Text = Val(mp3.Text)
    ElseIf Val(tc3.Text) = Val(tc5.Text) Then
        tc5.Text = Val(mp3.Text)
    ElseIf Val(tc4.Text) = Val(tc1.Text) Then
        tc1.Text = Val(mp4.Text)
    ElseIf Val(tc4.Text) = Val(tc5.Text) Then
        tc5.Text = Val(mp4.Text)
    End If
    'temp1 = tes1.Text
    'tes1.Text = tes5.Text
    'tes5.Text = temp1
    'temp5 = tc1.Text
    'tc1.Text = tc5.Text
    'tc5.Text = temp5
ElseIf Val(cutpoint1.Text) = 3 And Val(cutpoint2.Text) = 4 Then
    mp3.Text = Val(tes3.Text)
    mp4.Text = Val(tes4.Text)
    ping3.Caption = Val(tc3.Text)
    ping4.Caption = Val(tc4.Text)
    'temp1 = tes1.Text
    'tes1.Text = tc5.Text
    'tc5.Text = temp1
    'temp2 = tes2.Text
    'tes2.Text = tc1.Text
    'tc1.Text = temp2

    temp3 = tes3.Text
    tes3.Text = tc3.Text
    tc3.Text = temp3
    temp4 = tes4.Text
    tes4.Text = tc4.Text
    tc4.Text = temp4

    If Val(tes3.Text) = Val(tes1.Text) Then
        tes1.Text = Val(ping3.Caption)
    ElseIf Val(tes3.Text) = Val(tes2.Text) Then
        tes4.Text = Val(ping3.Caption)
    ElseIf Val(tes3.Text) = Val(tes5.Text) Then
        tes5.Text = Val(ping3.Caption)
    ElseIf Val(tes4.Text) = Val(tes1.Text) Then
        tes1.Text = Val(ping4.Caption)
```

```
   ElseIf Val(tes4.Text) = Val(tes2.Text) Then
      tes4.Text = Val(ping4.Caption)
   ElseIf Val(tes4.Text) = Val(tes5.Text) Then
      tes5.Text = Val(ping4.Caption)
   End If
   If Val(tc3.Text) = Val(tc1.Text) Then
      tc1.Text = Val(mp3.Text)
   ElseIf Val(tc3.Text) = Val(tc2.Text) Then
      tc2.Text = Val(mp3.Text)
   ElseIf Val(tc3.Text) = Val(tc5.Text) Then
      tc5.Text = Val(mp3.Text)
   ElseIf Val(tc4.Text) = Val(tc1.Text) Then
      tc1.Text = Val(mp4.Text)
   ElseIf Val(tc4.Text) = Val(tc2.Text) Then
      tc2.Text = Val(mp4.Text)
   ElseIf Val(tc4.Text) = Val(tc5.Text) Then
      tc5.Text = Val(mp4.Text)

   End If
   'tes5.Text = tes5.Text
   'tc2.Text = tc2.Text
End If

'frmmapping.Show

   Exit Sub
salah:
   MsgBox Error$(Err)
   Exit Sub
End Sub

Private Sub Command5_Click()

End Sub

'==========  mengisi inputan listbox  =============


Private Sub Form_Load()
   cmdHitung.Default = True
   SSTab1.Tab = 0
   'saham 1.
   cmbsaham1.AddItem "10 %"
   cmbsaham1.AddItem "20 %"
   cmbsaham1.AddItem "30 %"
   cmbsaham1.AddItem "40 %"
   cmbsaham1.AddItem "50 %"
   cmbsaham1.AddItem "60 %"
   cmbsaham1.AddItem "70 %"
   cmbsaham1.AddItem "80 %"
```

```
cmbsaham1.AddItem "90 %"
cmbsaham1.AddItem "100 %"
'saham 2
cmbsaham2.AddItem "10 %"
cmbsaham2.AddItem "20 %"
cmbsaham2.AddItem "30 %"
cmbsaham2.AddItem "40 %"
cmbsaham2.AddItem "50 %"
cmbsaham2.AddItem "60 %"
cmbsaham2.AddItem "70 %"
cmbsaham2.AddItem "80 %"
cmbsaham2.AddItem "90 %"
cmbsaham2.AddItem "100 %"
'saham 3
cmbsaham3.AddItem "10 %"
cmbsaham3.AddItem "20 %"
cmbsaham3.AddItem "30 %"
cmbsaham3.AddItem "40 %"
cmbsaham3.AddItem "50 %"
cmbsaham3.AddItem "60 %"
cmbsaham3.AddItem "70 %"
cmbsaham3.AddItem "80 %"
cmbsaham3.AddItem "90 %"
cmbsaham3.AddItem "100 %"
'saham 4
cmbsaham4.AddItem "10 %"
cmbsaham4.AddItem "20 %"
cmbsaham4.AddItem "30 %"
cmbsaham4.AddItem "40 %"
cmbsaham4.AddItem "50 %"
cmbsaham4.AddItem "60 %"
cmbsaham4.AddItem "70 %"
cmbsaham4.AddItem "80 %"
cmbsaham4.AddItem "90 %"
cmbsaham4.AddItem "100 %"
'saham 5
cmbsaham5.AddItem "10 %"
cmbsaham5.AddItem "20 %"
cmbsaham5.AddItem "30 %"
cmbsaham5.AddItem "40 %"
cmbsaham5.AddItem "50 %"
cmbsaham5.AddItem "60 %"
cmbsaham5.AddItem "70 %"
cmbsaham5.AddItem "80 %"
cmbsaham5.AddItem "90 %"
cmbsaham5.AddItem "100 %"
'nilai pc dan pm]
cmbpc.AddItem 0.1
cmbpc.AddItem 0.2
cmbpc.AddItem 0.3
```

```
    cmbpc.AddItem 0.4
    cmbpc.AddItem 0.5
    cmbpc.AddItem 0.6
    cmbpc.AddItem 0.7
    cmbpc.AddItem 0.8
    cmbpc.AddItem 0.9
    cmbpc.AddItem 1

    cmbpm.AddItem 0.01
    cmbpm.AddItem 0.02
    cmbpm.AddItem 0.03
    cmbpm.AddItem 0.04
    cmbpm.AddItem 0.05
    cmbpm.AddItem 0.06
    cmbpm.AddItem 0.07
    cmbpm.AddItem 0.08
    cmbpm.AddItem 0.09
    cmbpm.AddItem 0.1

    '============ fungsi f itness =============

    lblfpitnes.Caption = "Rumus : F=(r*w)/(C*w)^1/2"
End Sub

Private Sub Form_QueryUnload(Cancel As Integer, UnloadMode As Integer)
    Dim I As Integer
    Dim down As Integer
    Dim across As Integer
    Frame1.Visible = False
    SSTab1.Visible = False

    DrawWidth = 4
    For I = 1 To 16000
        down = down + 1
        across = across + 1
        PSet (Rnd * across, Rnd * down), QBColor(Rnd * 15)
    Next I
    End
End Sub

'====================  Populasi awal  ================

Private Sub acak1()
    On Error GoTo salah
    ReDim Number(1 To txtValue.Text) As Integer
    Dim I As Integer, n As Integer, temp As Integer
    Randomize       ' seed random number generator
    I = 1
    Do
        temp = Int(Rnd(1) * ((txtMax.Text - txtMin.Text) + 1) + txtMin.Text)
```

```
      If I = 1 Then  ' don't test if first number (will be = to itself)
         Number(I) = temp
         I = I + 1
      Else
         For n = 1 To I - 1
            If Number(n) = temp Then   ' check all numbers for duplicates
               Exit For
            End If
         Next n
         If Number(n) <> temp Then      ' temp is unique
            Number(I) = temp
            I = I + 1                  ' advance counter
         Else
         End If
      End If
Loop While I <= txtValue.Text       ' repeat until you have enough unique numbers
For I = 1 To UBound(Number)
   m = m & "" & (Number(I)) & "     "
Next I
Text2.Text = m
List1.AddItem Text2.Text
'r46 = Mid(Text2.Text, 1, 5)
'r47 = Mid(Text2.Text, 7, 5)
'r48 = Mid(Text2.Text, 13, 5)
'r49 = Mid(Text2.Text, 19, 5)
'r50 = Mid(Text2.Text, 25, 5)

'Text2.Text = Text2.Text & " = " & Val(r46) + Val(r47) + Val(r48) + Val(r49) + Val(r50)

Exit Sub
salah:
   MsgBox Error$(Err)
   Exit Sub
End Sub

Exit Sub
salah:
   MsgBox Error$(Err)
   Exit Sub
End Sub

Private Sub acak3()
   On Error GoTo salah
   ReDim Number(1 To txtValue.Text) As Integer
   Dim I As Integer, n As Integer, temp As Integer
   Randomize       ' seed random number generator
   I = 1
   Do
      temp = Int(Rnd(1) * ((txtMax.Text - txtMin.Text) + 1) + txtMin.Text)
      If I = 1 Then  ' don't test if first number (will be = to itself)
```

```
            Number(I) = temp
            I = I + 1
        Else
            For n = 1 To I - 1
                If Number(n) = temp Then   ' check all numbers for duplicates
                    Exit For
                End If
            Next n
            If Number(n) <> temp Then      ' temp is unique
                Number(I) = temp
                I = I + 1                  ' advance counter
            Else
            End If
        End If
Loop While I <= txtValue.Text       ' repeat until you have enough unique numbers
For I = 1 To UBound(Number)
    m = m & "" & (Number(I)) & "     "
Next I
Text4.Text = m
List1.AddItem Text4.Text
'r36 = Mid(Text4.Text, 1, 5)
'r37 = Mid(Text4.Text, 7, 5)
'r38 = Mid(Text4.Text, 13, 5)
'r39 = Mid(Text4.Text, 19, 5)
'r40 = Mid(Text4.Text, 25, 5)

'Text4.Text = Text4.Text & " = " & Val(r36) + Val(r37) + Val(r38) + Val(r39) + Val(r40)

Exit Sub
salah:
    MsgBox Error$(Err)
    Exit Sub
End Sub

Exit Sub
salah:
    MsgBox Error$(Err)
    Exit Sub
End Sub

Private Sub acak5()
    On Error GoTo salah
    ReDim Number(1 To txtValue.Text) As Integer
    Dim I As Integer, n As Integer, temp As Integer
    Randomize       ' seed random number generator
    I = 1
    Do
        temp = Int(Rnd(1) * ((txtMax.Text - txtMin.Text) + 1) + txtMin.Text)
        If I = 1 Then  ' don't test if first number (will be = to itself)
            Number(I) = temp
```

```
        I = I + 1
      Else
        For n = 1 To I - 1
          If Number(n) = temp Then   ' check all numbers for duplicates
            Exit For
          End If
        Next n
        If Number(n) <> temp Then      ' temp is unique
          Number(I) = temp
          I = I + 1                ' advance counter
        Else
        End If
      End If
Loop While I <= txtValue.Text       ' repeat until you have enough unique numbers
For I = 1 To UBound(Number)
   m = m & "" & (Number(I)) & "     "
Next I
Text6.Text = m
List1.AddItem Text6.Text
'r26 = Mid(Text6.Text, 1, 5)
'r27 = Mid(Text6.Text, 7, 5)
'r28 = Mid(Text6.Text, 13, 5)
'r29 = Mid(Text6.Text, 19, 5)
'r30 = Mid(Text6.Text, 25, 5)

'Text6.Text = Text6.Text & " = " & Val(r26) + Val(r27) + Val(r28) + Val(r29) + Val(r30)

Exit Sub
salah:
   MsgBox Error$(Err)
   Exit Sub
End Sub

Private Sub acak6()
   On Error GoTo salah
   ReDim Number(1 To txtValue.Text) As Integer
   Dim I As Integer, n As Integer, temp As Integer
   Randomize       ' seed random number generator
   I = 1
   Do
      temp = Int(Rnd(1) * ((txtMax.Text - txtMin.Text) + 1) + txtMin.Text)
      If I = 1 Then  ' don't test if first number (will be = to itself)
        Number(I) = temp
        I = I + 1
      Else
        For n = 1 To I - 1
          If Number(n) = temp Then   ' check all numbers for duplicates
            Exit For
          End If
        Next n
```

```
            If Number(n) <> temp Then      ' temp is unique
               Number(I) = temp
               I = I + 1                   ' advance counter
            Else
            End If
         End If
Loop While I <= txtValue.Text       ' repeat until you have enough unique numbers
For I = 1 To UBound(Number)
   m = m & "" & (Number(I)) & "     "
Next I
Text7.Text = m
List1.AddItem Text7.Text
'r21 = Mid(Text7.Text, 1, 5)
'r22 = Mid(Text7.Text, 7, 5)
'r23 = Mid(Text7.Text, 13, 5)
'r24 = Mid(Text7.Text, 19, 5)
'r25 = Mid(Text7.Text, 25, 5)

'Text7.Text = Text7.Text & " = " & Val(r21) + Val(r22) + Val(r23) + Val(r24) + Val(r25)

Exit Sub
salah:
   MsgBox Error$(Err)
   Exit Sub
End Sub

Private Sub acak7()
   On Error GoTo salah
   ReDim Number(1 To txtValue.Text) As Integer
   Dim I As Integer, n As Integer, temp As Integer
   Randomize       ' seed random number generator
   I = 1
   Do
      temp = Int(Rnd(1) * ((txtMax.Text - txtMin.Text) + 1) + txtMin.Text)
      If I = 1 Then  ' don't test if first number (will be = to itself)
         Number(I) = temp
         I = I + 1
      Else
         For n = 1 To I - 1
            If Number(n) = temp Then   ' check all numbers for duplicates
               Exit For
            End If
         Next n
         If Number(n) <> temp Then      ' temp is unique
            Number(I) = temp
            I = I + 1                   ' advance counter
         Else
         End If
      End If
Loop While I <= txtValue.Text       ' repeat until you have enough unique numbers
```

```
For I = 1 To UBound(Number)
   m = m & "" & (Number(I)) & "     "
Next I
Text8.Text = m
List1.AddItem Text8.Text
'r16 = Mid(Text8.Text, 1, 5)
'r17 = Mid(Text8.Text, 7, 5)
'r18 = Mid(Text8.Text, 13, 5)
'r19 = Mid(Text8.Text, 19, 5)
'r20 = Mid(Text8.Text, 25, 5)

'Text8.Text = Text8.Text & " = " & Val(r16) + Val(r17) + Val(r18) + Val(r19) + Val(r20)

Exit Sub
salah:
   MsgBox Error$(Err)
   Exit Sub
End Sub

Private Sub acak8()
   On Error GoTo salah
   ReDim Number(1 To txtValue.Text) As Integer
   Dim I As Integer, n As Integer, temp As Integer
   Randomize       ' seed random number generator
   I = 1
   Do
      temp = Int(Rnd(1) * ((txtMax.Text - txtMin.Text) + 1) + txtMin.Text)
      If I = 1 Then  ' don't test if first number (will be = to itself)
         Number(I) = temp
         I = I + 1
      Else
         For n = 1 To I - 1
            If Number(n) = temp Then   ' check all numbers for duplicates
               Exit For
            End If
         Next n
         If Number(n) <> temp Then      ' temp is unique
            Number(I) = temp
            I = I + 1                  ' advance counter
         Else
         End If
      End If
Loop While I <= txtValue.Text       ' repeat until you have enough unique numbers
For I = 1 To UBound(Number)
   m = m & "" & (Number(I)) & "     "
Next I
Text9.Text = m
List1.AddItem Text9.Text
'r11 = Mid(Text9.Text, 1, 5)
'r12 = Mid(Text9.Text, 7, 5)
```

```
'r13 = Mid(Text9.Text, 13, 5)
'r14 = Mid(Text9.Text, 19, 5)
'r15 = Mid(Text9.Text, 25, 5)

'Text9.Text = Text9.Text & " = " & Val(r11) + Val(r12) + Val(r13) + Val(r14) + Val(r15)

Exit Sub
salah:
   MsgBox Error$(Err)
   Exit Sub
End Sub

Private Sub acak9()
   On Error GoTo salah
   ReDim Number(1 To txtValue.Text) As Integer
   Dim I As Integer, n As Integer, temp As Integer
   Randomize       ' seed random number generator
   I = 1
   Do
      temp = Int(Rnd(1) * ((txtMax.Text - txtMin.Text) + 1) + txtMin.Text)
      If I = 1 Then  ' don't test if first number (will be = to itself)
         Number(I) = temp
         I = I + 1
      Else
         For n = 1 To I - 1
            If Number(n) = temp Then   ' check all numbers for duplicates
               Exit For
            End If
         Next n
         If Number(n) <> temp Then      ' temp is unique
            Number(I) = temp
            I = I + 1                ' advance counter
         Else
         End If
      End If
Loop While I <= txtValue.Text       ' repeat until you have enough unique numbers
For I = 1 To UBound(Number)
   m = m & "" & (Number(I)) & "     "
Next I
Text10.Text = m
List1.AddItem Text10.Text
'r6 = Mid(Text10.Text, 1, 5)
'r7 = Mid(Text10.Text, 7, 5)
'r8 = Mid(Text10.Text, 13, 5)
'r9 = Mid(Text10.Text, 19, 5)
'r10 = Mid(Text10.Text, 25, 5)

'Text10.Text = Text10.Text & " = " & Val(r6) + Val(r7) + Val(r8) + Val(r9) + Val(r10)

Exit Sub
```

```
salah:
   MsgBox Error$(Err)
   Exit Sub
End Sub


'Text1.Text = Text1.Text & " = " & Val(r1) + Val(r2) + Val(r3) + Val(r4) + Val(r5)
'acak2
'acak3
'acak4
'acak5
'acak6
'acak7
'acak8
'acak9
'acak10
'cmdAcak.Caption = "Reset"
'List1.Clear

Exit Sub
salah:
   MsgBox Error$(Err)
   Exit Sub
End Sub

Private Sub Adodc2_MoveComplete(ByVal adReason As ADODB.EventReasonEnum,
ByVal pError As ADODB.Error, adStatus As ADODB.EventStatusEnum, ByVal
pRecordset As ADODB.Recordset)
  'This will display the current record position for this recordset
  Adodc2.Caption = "Data ke: " & CStr(Adodc2.Recordset.AbsolutePosition)
End Sub

Private Sub Adodc1_MoveComplete(ByVal adReason As ADODB.EventReasonEnum,
ByVal pError As ADODB.Error, adStatus As ADODB.EventStatusEnum, ByVal
pRecordset As ADODB.Recordset)
  'This will display the current record position for this recordset
  Adodc1.Caption = "Data saham ke: " & CStr(Adodc1.Recordset.AbsolutePosition)
End Sub
```

This document was created with Win2PDF available at http://www.daneprairie.com.
The unregistered version of Win2PDF is for evaluation or non-commercial use only.