

## FUNGSI PENCABANGAN DAN PERULANGAN

Kedua fungsi ini sangat banyak digunakan dalam proses pemrograman. Kita akan mencobanya dalam sebuah program non database.

Fungsi pencabangan dan perulangan yang sering digunakan antara lain:

**1. IF... Then**

*IF <Kondisi> Then <Pernyataan>*

**2. IF... Then...Else...**

*IF <Kondisi1> Then <Pernyataan1> Else <Pernyataan2>*

**3. IF... Then...Elseif**

*If <Kondisi1> Then <Pernyataan1>  
Elseif <Kondisi2> Then  
    <Pernyataan2>  
Endif  
    <Pernyataan3>  
Endif*

**4. IIF**

*Iif (Grade= 'D', 'Her' ,Iif (Grade= 'A', 'Memuaskan', Iif(Grade= 'B', 'Baik','Cukup')) ) "*

**5. For...Next**

*For <Variabel> Step <Variabel>  
    <Pernyataan>  
Next <Variabel>*

**6. Do While... Loop**

*Do While <Kondisi>  
    <Pernyataan>  
Loop*

**7. While...End While**

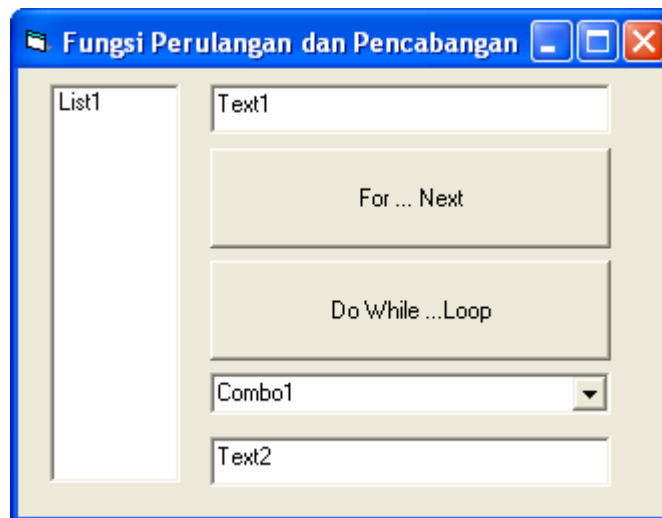
*While <Kondisi>  
    <Pernyataan>  
End While*

**8. Do Until...Loop**

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*Do Until <Kondisi>*  
*<Pernyataan>*  
*Loop*

### Program Pertama



### Listing Program

```
Private Sub Command1_Click()  
List1.Clear  
For i = 1 To 5  
    List1.AddItem i  
Next i  
End Sub  
  
Private Sub Command2_Click()  
Combo1.Clear  
Dim a As Byte  
Do While a < 5  
    a = a + 1  
    Combo1.AddItem a  
Loop  
End Sub  
  
Private Sub List1_Click()  
If List1.ListIndex = 0 Then  
    Text1 = "Satu"  
ElseIf List1.ListIndex = 1 Then  
    Text1 = "Dua"  
ElseIf List1.ListIndex = 2 Then  
    Text1 = "Tiga"
```

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```
ElseIf List1.ListIndex = 3 Then  
    Text1 = "Empat"  
ElseIf List1.ListIndex = 4 Then  
    Text1 = "Lima"  
End If  
End Sub
```

```
Private Sub Combol_Click()  
Select Case Combol.ListIndex  
    Case 0  
        Text2 = 1000  
    Case 1  
        Text2 = 2000  
    Case 2  
        Text2 = 3000  
    Case 3  
        Text2 = 4000  
    Case 4  
        Text2 = 5000  
End Select  
End Sub
```

### Program Huruf



### Listing Program

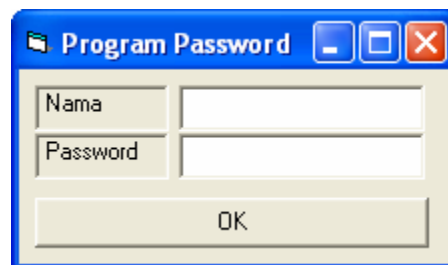
```
Private Sub option1_Click()  
Label1.ForeColor = vbRed  
End Sub
```

```
Private Sub option2_Click()  
Label1.ForeColor = vbYellow  
End Sub
```

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```
Private Sub option3_Click()  
Label1.ForeColor = vbBlue  
End Sub  
  
Private Sub option4_Click()  
Label1.ForeColor = vbGreen  
End Sub  
  
Private Sub check1_Click()  
If Check1.Value = vbChecked Then  
    Label1.FontBold = True  
ElseIf Check1.Value = vbUnchecked Then  
    Label1.FontBold = False  
End If  
End Sub  
  
Private Sub check2_Click()  
If Check2.Value = vbChecked Then  
    Label1.FontItalic = True  
ElseIf Check2.Value = vbUnchecked Then  
    Label1.FontItalic = False  
End If  
End Sub  
  
Private Sub check3_Click()  
If Check3.Value = vbChecked Then  
    Label1.FontSize = 20  
ElseIf Check3.Value = vbUnchecked Then  
    Label1.FontSize = 15  
End If  
End Sub  
  
Private Sub command1_Click()  
End  
End Sub
```

### Program Password



### Listing Program

```
Private Sub Command1_Click()  
Do While (True)
```

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```
If Text1 = "Nama Saya" And Text2 = "Rahasia" Then
    pesan = MsgBox("Password Benar")
End
Else
    pesan = MsgBox("Password Salah.. ulangi lagi")
    Text1.Text = ""
    Text2.Text = ""
    Text1.SetFocus
Exit Do
End If
Loop
End Sub
```

### Program Jurusan



The screenshot shows a standard Windows application window with a blue title bar containing the text 'Program IF' and standard window control buttons (minimize, maximize, close). The main area of the window is light beige and contains three vertically stacked text boxes with labels 'Nama', 'Kelas', and 'Jurusan' to their left. At the bottom of the window, there are two buttons: 'Ulangi' on the left and 'Selesai' on the right.

### Listing Program

```
Private Sub Command1_Click()
Text1 = ""
Text2 = ""
Text3 = ""
Text1.SetFocus
End Sub

Private Sub Command2_Click()
End
End Sub

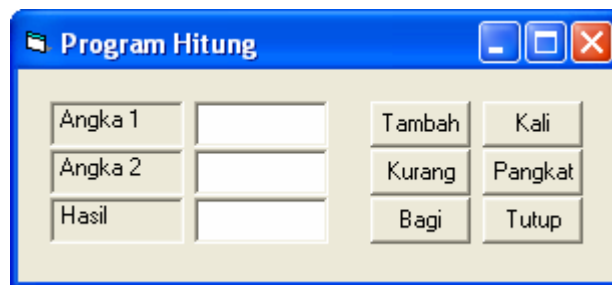
Private Sub Form_Load()
Text3.Enabled = False
End Sub

Private Sub Text1_KeyPress(KeyAscii As Integer)
KeyAscii = Asc(UCase(Chr(KeyAscii)))
If KeyAscii = 13 Then Text2.SetFocus
End Sub
```

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```
Private Sub Text2_KeyPress(KeyAscii As Integer)
KeyAscii = Asc(UCase(Chr(KeyAscii)))
If KeyAscii = 13 Then
    If Text2 <> "MI" And Text2 <> "KA" And Text2 <> "TK" Then
        MsgBox "Jurusan tidak terdaftar"
        Text2 = ""
        Text2.SetFocus
        Exit Sub
    End If
    If Text2 = "MI" Then Text3 = "MANAJEMEN INFORMATIKA"
    If Text2 = "KA" Then Text3 = "KOMPUTER AKUNTANSI"
    If Text2 = "TK" Then Text3 = "TEKNIK KOMPUTER"
    Command1.SetFocus
End If
End Sub
```

### Program Kalkulasi



### Listing Program

```
Private Sub Form_Load()
Text3.Enabled = False
End Sub

Private Sub Command1_Click()
Text3 = Val(Text1) + Val(Text2)
End Sub

Private Sub Command2_Click()
Text3 = Text1 - Text2
End Sub

Private Sub Command3_Click()
Text3 = Text1 / Text2
End Sub

Private Sub Command4_Click()
Text3 = Text1 * Text2
End Sub

Private Sub Command5_Click()
Text3 = Text1 ^ Text2
```

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End Sub

```
Private Sub Command6_Click()  
End  
End Sub
```

### Program Gaji



### Listing Program

```
Private Sub Form_Load()  
Dim i As Byte  
For i = 1 To 3  
    Combo1.AddItem CStr(i)  
Next  
For i = 1 To 4  
    List1.AddItem CStr(i)  
Next  
End Sub  
  
Private Sub Combo1_Click()  
Select Case Combo1.ListIndex  
    Case 0  
        Text2 = 100000  
        Text3 = 50000  
    Case 1  
        Text2 = 150000  
        Text3 = 75000  
    Case 2  
        Text2 = 200000  
        Text3 = 100000  
End Select  
End Sub  
  
Private Sub Command1_Click()
```

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```
Kosong  
Text1.SetFocus  
End Sub
```

```
Private Sub Command2_Click()  
End  
End Sub
```

```
Private Sub List1_Click()  
If List1.ListIndex = 0 Then  
    Text4 = 100000  
ElseIf List1.ListIndex = 1 Then  
    Text4 = 200000  
ElseIf List1.ListIndex = 2 Then  
    Text4 = 300000  
ElseIf List1.ListIndex = 3 Then  
    Text4 = 400000  
End If  
End Sub
```

```
Private Sub Text5_Click()  
Text5 = Val(Text2.Text) + Val(Text3.Text) + Val(Text4.Text)  
End Sub
```

```
Sub Kosong()  
Dim CTL As Control  
For Each CTL In Me  
    If TypeName(CTL) = "TextBox" Or TypeName(CTL) = "ComboBox" Or  
    TypeName(CTL) = "ListBox" Then  
        CTL.Text = ""  
    End If  
Next  
End Sub
```

### **Program Deret Angka**

Buatlah sebuah command dalam form, kemudian double click command tersebut lalu tulis kode program di bawah ini dan perhatikan hasilnya.

```
Private Sub Command1_Click()  
For i = 1 To 10  
    Print i  
Next i  
  
For i = 1 To 10  
    Print i;  
Next i  
End Sub
```