

## PROCEDURE FUNCTION

Pada Visual Basic telah tersedia berbagai fungsi bawaan seperti cos, sqr, chr. Tetapi terkadang fungsi – fungsi yang telah tersedia di Vb masih jauh dari kebutuhan seorang programmer. Untuk itulah sebagaimana bahasa pemrograman lainnya, Programmer memanfaatkan fungsi – fungsi sendiri yang lebih dikenal dengan procedure function.

Adapun penulisan syntax penulisan function, sebagai berikut :

```
[Private | Public] [static] Function nama_procedure (argumen-  
argumen / parameter) [as Type]  
statements  
End Function
```

yang membedakan antara procedure dan function, diantaranya :

- 1 ) umumnya anda dapat memanggil suatu function dengan mengikutkan nama function sisi kanan dari statements atau ekspresi. (returnvalue = function())
- 2 ) function memiliki type data seperti sebuah variable dan ini menentukan type dari nilai yang dikembalikan
- 3 ) nilai kembali dimasukan ke nama function itu sendiri. Function sendiri dapat menjadi bagian dari suatu expresi yang panjang

beberapa contoh penulisan function dan procedure :

```
Public Sub InsertionSort(numbers() As Long, ByVal num As Long)
```

```
Function ConvertOperation() As String
```

```
Private Function cvHexToDec(ByVal value As String) As String
```

```
Function GetVariableName(Optional ByVal blnGetRegisterValue As Boolean) As String
```

```
Function NoHash(ByVal strIn As String) As String
```

```
Public Function GroupCode(ByVal InputCode As String)
```

```
Sub ParseOperands(ByVal QuickCheck As Boolean)
```

```
Sub DisablePrint(ByVal intWindow As Integer)
```

dalam sebuah project, biasanya programmer meletakkan fungsi dan procedure pada modul – modul yang berada diluar form. Dalam visual basic dikenal dengan (\*.Bas). Pendeklarasian fungsi atau procedure dalam pemrograman visual basic ada yang bersifat lokal dan public. Tiap – tiap procedure ataupun fungsi yang dibuat untuk memudahkan kerja programmer dengan jumlah form dan koneksi yang kompleks.

### **Form1.frm :**

```
Option Base 0
```

```
Private Sub Command1_Click()
```

```
SelectionSort list(), items
```

```
tampilkan
```

```
End Sub
```

```
Private Sub exit_Click()
```

```
Unload Me
```

```
End Sub
```

```
Private Sub konfigurasi_Click()
```

```
    Dim size As Long
```

```
    Dim min As Long
```

```
    Dim max As Long
```

```
    Dim i As Long
```

```
Form2.Visible = True
```

```
Do While Form2.Visible
```

```
    DoEvents
```

```
Loop
```

```
    size = Val(Form2.Text3.Text)
```

```
If (size = 0) Then
```

```
    Exit Sub
```

```
End If
min = Val(Form2.Text1.Text)
max = Val(Form2.Text2.Text)
random list(), min, max, size
lstList.Clear
For i = 0 To (size - 1)
    lstList.AddItem list(i)
Next i
items = lstList.ListCount
```

**End Sub**

**Private Sub tampilkan()**

```
Dim i As Long
lstsort.Clear
For i = 0 To (items - 1)
    lstsort.AddItem (list(i))
Next i
```

**End Sub**

**Private Sub random500\_Click()**

```
Dim i As Long
random list(), 1, 500, 500
lstList.Clear
For i = 0 To 499
    lstList.AddItem list(i)
Next i
items = lstList.ListCount
```

**End Sub**

Form1

menu

382	2
179	2
54	3
354	11
25	13
269	14
365	15
308	15

sorting

### form2.frm

```
Private Sub Command1_Click()
    Form2.Visible = False
End Sub
```

### module1.bas

```
Public Const maxitem = 3000
Public list(maxitem) As Long
Public i As Long
Public min As Long
Public max As Long
Public jum As Long
Public temp As Long
Public items As Long
Public Sub random(list() As Long, ByVal min As Long, ByVal max As
Long, ByVal jum As Long)
    Dim i As Long
    Randomize ((min * max) Mod jum)
    For i = 0 To (jum - 1)
        list(i) = (Rnd() * (max - min)) + min
    Next i
End Sub
Public Sub SelectionSort(numbers() As Long, ByVal jum As Long)
```

```

temp = 0
For i = 0 To (jum - 2)
    min = i
    For j = (i + 1) To (jum - 1)
        If numbers(j) < numbers(min) Then
            min = j
        End If
    Next j
    temp = numbers(i)
    numbers(i) = numbers(min)
    numbers(min) = temp
Next i

```

**End Sub**

The screenshot shows a Windows form window titled "Form2". It has a light beige background. There are three labels on the left: "MIN", "MAX", and "JUMLAH". To the right of each label is a text box containing a value: "40" for MIN, "100" for MAX, and "999" for JUMLAH. At the bottom center of the form is a button labeled "SUBMIT".

**latihan soal :**

The screenshot shows a standard Windows calculator window titled "Kalkulator". The menu bar includes "File", "Edit", and "Help". The display area shows the number "9.9498743710662" in red. The calculator has a grid of buttons for digits (0-9), basic operations (+, -, \*, /), and various mathematical functions like sin, cos, exp, and log.

**buatlah dengan memanfaatkan fungsi dan procedure.**