Lab-session 6

1) Write a user-defined function using a SELECT CASE-structure which produces

$$f(x) = \begin{cases} -\sin x & \text{for } x < 0 \\ 2x & \text{for } 0 \le x \le 2 \\ x^2 & \text{for } 2 \le x \le 4 \\ 16 & \text{for } x > 4 \end{cases}$$

2) Write a user-defined function using a SELECT CASE-structure which computes the weekday for a given date, e.g. the input date 05/01/2005 gives as return "Wednesday".

3) Eliminate from the user defined function in Lab5 task 1) b) the IF-structures and replace them by SELECT CASE structures. Recall:

```
: Function bmimean(bmin As Single, mf As String) As String
        If mf = "male" Then
        If (bmin < 20) Then
              bmimean = "underweight"
        ElseIf (bmin >= 20 And bmin < 25) Then
              bmimean = "normal weight"
        ElseIf (bmin >= 25 And bmin < 30) Then
              bmimean = "overweight"
        ElseIf (bmin >= 30 And bmin < 40) Then
              bmimean = "obese"
        Else
              bmimean = "extreme obese"
        End If
    ElseIf mf = "female" Then
        If (bmin < 19) Then
              bmimean = "underweight"
        ElseIf (bmin >= 19 And bmin < 24) Then
              bmimean = "normal weight"
        ElseIf (bmin >= 24 And bmin < 29) Then
              bmimean = "overweight"
        ElseIf (bmin >= 29 And bmin < 39) Then
              bmimean = "obese"
        Else
              bmimean = "extreme obese"
        End If
    Else
        bmimean = "Specify gender!"
    End If
    End Function
```

4) Catch up with the previous Lab-sessions.