

Solutions Lab-session 4

- 1) a) Function agegroup(birthdate As Date)

```
Dim age As Integer  
age = Int((Now() - birthdate) / 365)  
If age <= 10 Then  
    agegroup = "Group I"  
ElseIf age <= 18 Then  
    agegroup = "Group II"  
ElseIf age <= 30 Then  
    agegroup = "Group III"  
ElseIf age <= 45 Then  
    agegroup = "Group IV"  
ElseIf age <= 65 Then  
    agegroup = "Group V"  
Else  
    agegroup = "Group VI"  
End If  
End Function
```

- b) Function agelook(birthdate As Date, table)

```
Dim age As Integer  
age = Int((Now() - birthdate) / 365)  
agelook = Application.WorksheetFunction.HLookup(age, table, 2)  
End Function
```

- 2) a) Function hello1(x)

```
Dim y As Integer  
y = Hour(x)  
If y < 12 Then  
    hello1 = "Good Morning!"  
ElseIf y < 18 Then  
    hello1 = "Good Afternoon!"  
ElseIf y < 22 Then  
    hello1 = "Good Evening!"  
Else  
    hello1 = "Good Night!"  
End If  
End Function
```

- b) Function hello2(x)

```
Dim y As Integer
```

```

y = Hour(x)
If y < 12 Then
    hello2 = "Good Morning!"
ElseIf y < 16 Then
    hello2 = "Good Afternoon!"
ElseIf y < 21 Then
    hello2 = "Good Evening!"
Else
    hello2 = "Good Night!"
End If
End Function

```

c) Function hello(x)

```

Dim y As Integer
y = Month(x)
If y >= 5 And y <= 10 Then
    hello = hello1(x)
Else
    hello = hello2(x)
End If
End Function

```

3) Function Catt(x As String, table)

```

Dim y As Integer
Dim nn As String
y = Application.WorksheetFunction.VLookup(x, table, 4, False)
If y = 2 Or y = 10 Or y = 18 Or y = 36 Or y = 54 Or y = 86 Then
    Cat = "an inert gas."
ElseIf (y = 1 Or y = 6 Or y = 7 Or y = 8 Or y = 9 Or y = 15 Or y = 16 Or
        y = 17 Or y = 34 Or y = 35 Or y = 53 Or y = 85)
Then
    Cat = "a non-metall."
ElseIf y = 5 Or y = 14 Or y = 32 Or y = 33 Or y = 51 Or y = 52 Or y = 84 Then
    Cat = "a metalloid"
Else
    Cat = "a metall."
End If
nn = Application.WorksheetFunction.VLookup(x, table, 3, False)
Catt = nn & " is " & Cat
End Function

```