Solutions (Part II) Lab-session 2

1)
```
Sub Rainbow()
'
' Rainbow Macro
' draw a rainbow into the cells A1:K6
'
' Keyboard Shortcut: Ctrl+r
'
    Range("A1:K1").Select
    With Selection.Interior
        .ColorIndex = 3     (→13 in the reversed rainbow)
        .Pattern = xlSolid
    End With
    Range("A2:K2").Select
    With Selection.Interior
        .ColorIndex = 46 (→5 in the reversed rainbow)
        .Pattern = xlSolid
    End With
    Range("A3:K3").Select
    With Selection.Interior
        .ColorIndex = 6 (→4 in the reversed rainbow)
        .Pattern = xlSolid
    End With
    Range("A4:K4").Select
    With Selection.Interior
        .ColorIndex = 4 (→6 in the reversed rainbow)
        .Pattern = xlSolid
    End With
    Range("A5:K5").Select
    With Selection.Interior
        .ColorIndex = 5 (→46 in the reversed rainbow)
        .Pattern = xlSolid
    End With
Range("A6:K6").Select
With Selection.Interior
    .ColorIndex = 13 (→3 in the reversed rainbow)
    .Pattern = xlSolid
End With
End Sub
```

2)
```
Sub Copy()
'
' Copy Macro
' copy the content of A1:G6 to G21:M26
'
' Keyboard Shortcut: Ctrl+c
'
    Range("A1:G6").Select
    Selection.Copy
    Range("G21").Select
    ActiveSheet.Paste
    ActiveSheet.Paste
    Application.CutCopyMode = False
End Sub
```

4)
```
Sub SumA1A25()
'
' SumA1A25 Macro
' calculate the sum of the cells A1:A25
'
' Keyboard Shortcut: Ctrl+s
'
    Range("G13").Select
    ActiveCell.FormulaR1C1 = "The sum of the cells A1 to A25 is:"
    Range("K13").Select
    ActiveCell.FormulaR1C1 = "=SUM(R[-12]C[-10]:R[12]C[-10])"
    Range("L14").Select
End Sub
```

$$\sum_{a=1}^{25} 2a = 650 \qquad \sum_{a=11}^{35} a = 575 \qquad \sum_{a=1}^{25} 2^a = 67108862 \ .$$