OLE Automation – OOPDE Lab. 3

1. Start Microsoft Visual Studio .NET.
2. Create new project with **File --> New --> Project**. Choose language **Visual Basic** and **Windows Forms Application**.
3. Add Reference to **Microsoft Excel Object Library** by:
   a. From the menu **Project** choose **Add Reference**.
   b. In the tab **COM** find **Microsoft Excel 11.0 Object Library** and click it.
   c. Click **OK**.
4. Add a button to **Form1** from the **Toolbox**.
5. Double click **Button1** so the OnClick method is created.
6. Add the following code:

```
System.Threading.Thread.CurrentThread.CurrentCulture =
      System.Globalization.CultureInfo.CreateSpecificCulture("en-US")
Dim excelApp As Object
excelApp = CreateObject("Excel.Application")
excelApp.Workbooks.Add()
excelApp.Range("A1:C6").Select()
excelApp.ActiveCell.Formula = "Hello World!"
excelApp.Visible = True
```

7. Click F5 to start the application, then click the button and watch the result.
8. Add a second button to the form, double click on it and add the code in the OnClick method:

```
System.Threading.Thread.CurrentThread.CurrentCulture =
      System.Globalization.CultureInfo.CreateSpecificCulture("en-US")
Dim oXL As Object        ' Excel application
Dim oBook As Object      ' Excel workbook
Dim oSheet As Object     ' Excel Worksheet
Dim oChart As Object     ' Excel Chart

Dim iRow As Integer      ' Index variable for the current Row
Dim iCol As Integer      ' Index variable for the current Row

Const cNumCols = 10      ' Number of points in each Series
Const cNumRows = 2       ' Number of Series
Dim aTemp

ReDim aTemp(0 To cNumRows, 0 To cNumCols)
```

```
'Start Excel and create a new workbook
oXL = CreateObject("Excel.application")
oBook = oXL.Workbooks.Add
oSheet = oBook.Worksheets.Item(1)

' Insert Random data into Cells for the two Series:
Randomize(Now().ToOADate())
For iRow = 0 To cNumRows - 1
    For iCol = 0 To cNumCols - 1
        aTemp(iRow, iCol) = Int(Rnd() * 50) + 1
    Next iCol
Next iRow
oSheet.Range("A1").Resize(cNumRows, cNumCols).Value = aTemp

'Add a chart object to the first worksheet
oChart = oSheet.ChartObjects.Add(50, 40, 300, 200).Chart
oChart.SetSourceData(Source:=oSheet.Range("A1").Resize(cNumRows, cNumCols))

' Make Excel Visible:
oXL.Visible = True

oXL.UserControl = True
```

9. Click F5 to start the application, then click the button and watch the result.