

## Excel Objects

- Excel Objects
  - Introduction
  - Application Objects
  - Workbook Objects
  - Worksheet Objects
  - Range Objects
  - Reference

### Introduction

When programming using VBA, there are few important objects that a user would be dealing with.

- Application Objects
- Workbook Objects
- Worksheet Objects
- Range Objects

### Application Objects

The Application object consists of the following

Application-wide settings and options. Methods that return top-level objects, such as ActiveCell, ActiveSheet, and so on.

#### Example

```
'Example 1 :  
Set xlapp = CreateObject("Excel.Sheet")  
xlapp.Application.Workbooks.Open "C:\test.xls"
```

```
'Example 2 :  
Application.Windows("test.xls").Activate
```

```
'Example 3:  
Application.ActiveCell.Font.Bold = True
```

### Workbook Objects

The Workbook object is a member of the Workbooks collection and contains all the Workbook objects currently open in Microsoft Excel.

#### Example

```
'Ex 1 : To close Workbooks  
Workbooks.Close
```

```
'Ex 2 : To Add an Empty Work Book  
Workbooks.Add
```

```
'Ex 3: To Open a Workbook
Workbooks.Open FileName:="Test.xls", ReadOnly:=True

'Ex : 4 - To Activate WorkBooks
Workbooks("Test.xls").Worksheets("Sheet1").Activate
```

## Worksheet Objects

The Worksheet object is a member of the Worksheets collection and contains all the Worksheet objects in a workbook.

### Example

```
'Ex 1 : To make it Invisible
Worksheets(1).Visible = False

'Ex 2 : To protect an WorkSheet
Worksheets("Sheet1").Protect password:=strPassword, scenarios:=True
```

## Range Objects

Range Objects represent a cell, a row, a column, or a selection of cells containing one or more continuous blocks of cells.

```
'Ex 1 : To Put a value in the cell A5
Worksheets("Sheet1").Range("A5").Value = "5235"

'Ex 2 : To put a value in range of Cells
Worksheets("Sheet1").Range("A1:A4").Value = 5
```

## Reference

- Tutorialspoints [https://www.tutorialspoint.com/vba/vba\\_excel\\_objects.htm](https://www.tutorialspoint.com/vba/vba_excel_objects.htm)