

# Excel Assignment – 16

1. What is a Macro? How is it useful in excel or in your daily work?

A: Macros are a set of programming instructions written in VBA, which automate a repeated and standardized process in Excel and other Microsoft Office Applications, like Access, PowerPoint, Word & Outlook.

If you have tasks in Microsoft Excel that you do repeatedly, you can record a macro to automate those tasks. A macro is an action or a set of actions that you can run as many times as you want. When you create a macro, you are recording your mouse clicks and keystrokes.

2. What is VBA? Write its full form and briefly explain why VBA is used in excel?

A: VBA is an abbreviation for Visual Basic for Application. VBA is a programming language that was developed by Microsoft Corp., and it is integrated into the major Microsoft Office applications, such as Word, Excel, and Access.

The VBA programming language allows users to access functions beyond what is available in the MS Office applications. Users can also use VBA to customize applications to meet the specific needs of their business, such as creating user-defined functions, automating computer processes, and accessing Windows APIs.

- Learning VBA programming can help Microsoft Office users access functions beyond what is directly available in the various Office applications.
- VBA can be used to analyse large amounts of data, create and maintain complicated financial models.
- Recording a macro is relatively simple and requires no inherent knowledge of the VBA code and will work for simple processes. However, this method is not very customizable.

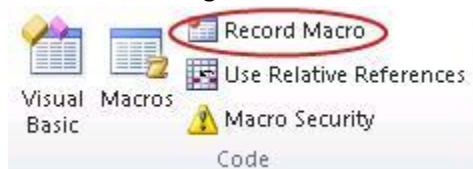
3. How do you record a macro? Write detailed steps to create a macro to automatically make the

A: Following table in bold and to create borders for it in excel.

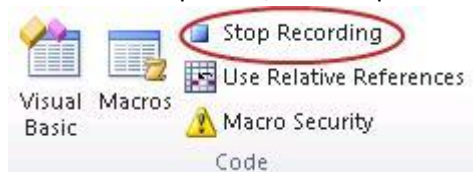
Macros and VBA tools can be found on the Developer tab, which is hidden by default, so the first step is to enable it.

Record a macro

1. In the Code group on the Developer tab, click Record Macro.
2. Optionally, enter a name for the macro in the Macro name box, enter a shortcut key in the Shortcut key box, and a description in the Description box, and then click OK to start recording.



3. Perform the actions you want to automate, such as entering boilerplate text or filling down a column of data.
4. On the Developer tab, click Stop Recording.



For the above example:

- i. In code group in the developer tab, click Record Macro.
- ii. Enter the name for the macro in the Macro name box, enter a shortcut key (ctrl+k) and then click ok.
- iii. Now select the table and go to home tab in font group click and border's drop-down menu and select "All Borders"
- iv. While the table still being selected click on the bold command button in the font group
- v. Go to the developer tab and click on stop recording to stop recording the macro.
- vi. Now you can run the macro using the shortcut or from the macro command from the developer tab

4. What do you mean when we say VBA Editor?

A: The main function of the VBE is to allow you to write and edit VBA code. The Visual Basic Editor is sometimes referred to as the Integrated Development Environment (IDE)

5. Briefly describe the interface of a VBA editor? What is properties window? And what is watch window? How do you display these windows?

A: Going top to bottom

You can see a menu bar with file, edit, view, insert, etc tabs and below it there is a toolbar.

Below it on the left side you can see project explorer which has all the elements like sheets and workbooks, it is like a collection of all the objects in a hierarchy.

Below it you have the properties windows which gives all the properties and values of the object selected.

In the center you have editor pane where you actually write the code

Below is the immediate window which can be viewed by selecting immediate window option from the drop-down window of view tab in menu bar or using shortcut ctrl+G.

Watch window appears automatically when watch expressions are defined in the project.

A watch expression is an expression that you define to be monitored in the Watch window.

When your application enters break mode, the watch expressions you selected appear in the Watch window where you can observe their values.

To open watch window select it from the drop-down menu of view tab.

6. What is an immediate Window and what is it used for?

A: The Immediate window displays information resulting from debugging statements in your code or from commands typed directly into the window.

Use the Immediate window to:

- Test problematic or newly written code.
- Query or change the value of a variable while running an application. While execution is halted, assign the variable a new value as you would in code.
- Query or change a property value while running an application.
- Call procedures as you would in code.
- View debugging output while the program is running.