

### Excel Assignment – 16

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

A macro is a set of instructions used to execute repetitive tasks. You can record a set of commands and then play them back with one or two keystrokes. That means that you can save A LOT of time when doing routine and repetitive tasks.

These macros make excel work for you. they replace actions that you do manually—everything from formatting cells, copying values, and calculating totals. So with a few clicks you can quickly replace repetitive tasks.

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

Visual Basic for Application is a human-readable and editable programming code that gets generated when you record a macro. With VBA you can create macros to automate repetitive word and data-processing functions, and generate custom forms, graphs, and reports. VBA functions within MS Office applications; it is not a stand-alone product.

VBA is used to automate tasks and perform several other functions beyond creating and organizing spreadsheets.

For example, users need to automate some aspects of Excel, such as repetitive tasks, frequent tasks, generating reports, etc. The user can create a VBA program (macro) within Excel that generates, formats, and prints monthly sales reports with graphical representation such as bar charts. They can execute the program with a single click, and excel will automatically generate the reports with ease as per the needs of the company.

3. How do you record a macro? Write detailed steps to create a macro to automatically make the following table in bold and to create borders for it in excel.

hi 78 hello 69 ineuron 45

On the Developer tab, click Record Macro. 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.

#### Steps to create macro:-

- 1. Open the workbook in which you want to create the macro.
- 2. On the Ribbon, click the "Developer" tab. If the Developer tab is not visible, you may need to enable it. To do this, click "File" > "Options" > "Customize Ribbon", and then check the box next to "Developer" in the list of main tabs.

- 3. In the "Code" group, click the "Record Macro" button.
- 4. In the "Record Macro" dialog box, enter a name for the macro in the "Macro name" field.
- 5. Optional: If you want to run the macro by pressing a shortcut key, you can assign a shortcut key by typing it in the "Shortcut key" field.
- 6. Optional: If you want to add the macro to a custom group on the Ribbon, select a custom group from the "Store macro in" dropdown list.
- 7. Click "OK" to start recording the macro.
- 8. Perform the actions that you want to include in the macro. For example, to make the table bold and add borders to it, select the cells in the table, then click the "Bold" button in the "Font" group on the Ribbon and click the "Borders" button in the "Font" group.
- 9. When you are finished recording the macro, click the "Stop Recording" button in the "Code" group on the Ribbon.

hi	78
hello	69
ineuron	45

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

Visual Basic Editor is a separate application that is a part of Excel and opens whenever you open an Excel workbook. By default, it's hidden and to access it, you need to activate it. VB Editor is the place where you keep the VB code.

When you record a macro, it automatically creates a new module in the VB Editor and inserts the code in that module.

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

The VBA editor interface consists of a number of windows and panels that you can use to create, edit, and debug your VBA code.

The Properties window is used to display properties for objects selected in the two main types of windows available in the Visual Studio integrated development environment (IDE). These two types of windows are

- Tool windows such as Solution Explorer, Class View, and Object browser
- Document windows containing such editors and designers as the forms designer, XML editor, and HTML editor.

The Properties window displays the properties of single or multiple selected items. If multiple items are selected, the intersection of all properties for all selected objects is displayed. Events related to a selected object within a form design window or HTML editor using COM+ metadata are displayed in the Properties window.

The Watch window is a panel that allows you to monitor the value of a variable or expression as your code is running. You can use the Watch window to see the value of a variable or expression change as your code executes, which can be useful for debugging purposes.

To display the Properties and Watch windows, you can go to the View menu in the VBA editor and select the Properties Window or Watch Window option. You can also use the keyboard shortcuts F4 and F5, respectively, to toggle these windows on and off.

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

The VBA Immediate Window is an tool that allows you to get immediate answers about your Excel files, and quickly execute code. It is built into the Visual Basic Editor, and has many different uses that can be very helpful when writing macros, debugging code, and displaying the results of your code.

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