

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.

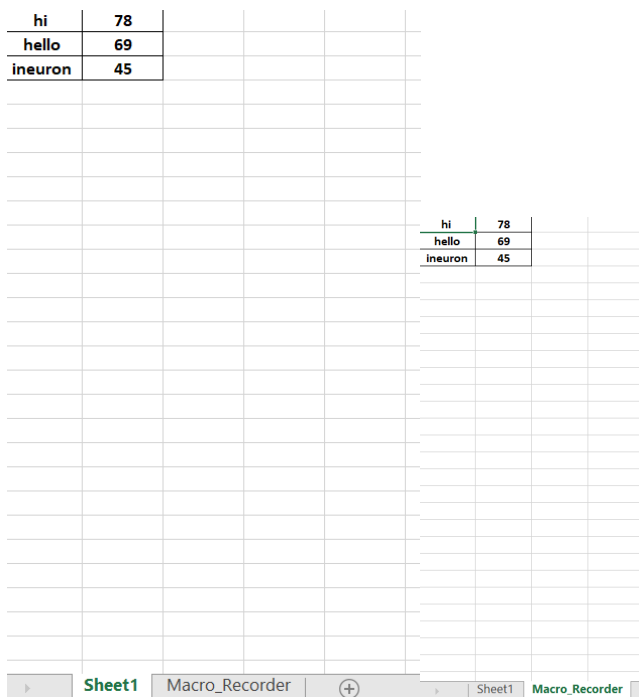
2. What is VBA? Write its full form and briefly explain why VBA is used in excel?

Visual Basic for Applications is a computer programming language developed and owned by Microsoft. With VBA you can create macros to automate repetitive word- and data-processing functions, and generate custom forms, graphs, and reports.

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.

1. Click the Developer tab.
2. In the Code group, click on the Macro button. This will open the 'Record Macro' dialog box.
3. In the Record Macro dialog box, enter a name for your macro. I am using the name **EnterText**. There are some naming conditions that you need to follow when naming a macro. For example, you can not use spaces in between. I usually prefer to keep my macro names as a single word, with different parts with a capitalized first alphabet. You can also use underscore to separate two words – such as Enter_Text.
4. (Optional Step) You can assign a keyboard shortcut if you want. In this case, we will use the shortcut Control + Shift + N. Remember that the shortcut you assign here would override any existing shortcuts in your workbook. For example, if you assign the shortcut Control + S, you will not be able to use this for saving the workbook (instead, everytime you use it, it will execute the macro).

5. In the 'Store macro in' option, make sure 'This Workbook' is selected. This step ensures that the macro is a part of the workbook. It will be there when you save it and reopen again, or even if you share it with someone.
6. (Optional Step) Enter a description. I usually don't do this, but if you're extremely organized, you may want to add what the macro is about.
7. Click OK. As soon as you click OK, it starts to record your actions in Excel. You can see the 'Stop recording' button in the Developer tab, which indicates that the macro recording is in progress.
8. Select cell A2.
9. Enter the text **Excel** (or you can use your name).
10. Hit the Enter key. This will select cell A3.
11. Click on the Stop Recording button in the Developer tab.



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.

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

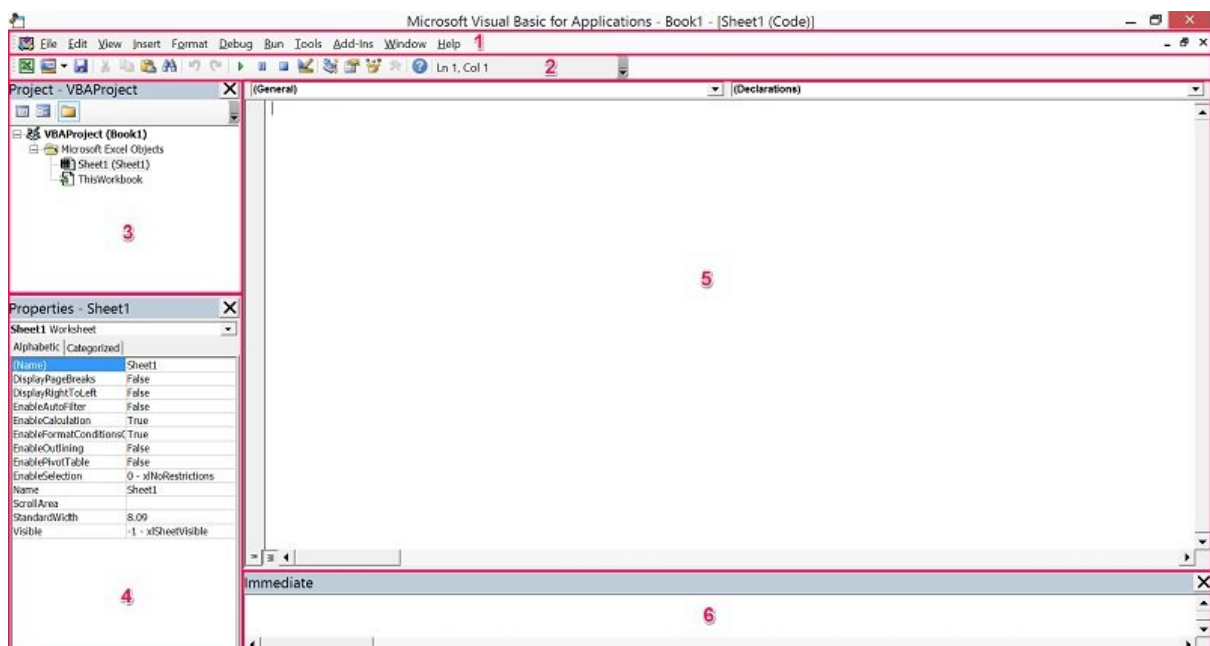
- Click on “Visual Basic” in the Developer tab of the Ribbon.



- Use the keyboard shortcut “Alt + F11”.

How Does The Visual Basic Editor Look

The basic VBE window can be divided in the following 6 sections, all of which I explain below. In reality, **there are more components** than those which appear in this screenshot (such as the Locals and Watch Windows) but, since they're more advanced, I'll cover them in a future Excel tutorial.



The Visual Basic Editor:

The Properties window lists the design-time properties for selected objects and their current settings. You can change these properties at design time. When you select multiple controls, the Properties window contains a list of the properties common to all the selected controls.

To navigate the Properties window

1. From the View menu of the Visual Basic Editor, choose Properties window (F4).
2. Select the object whose properties you want to display. You can either use the mouse to select the object or use the Project Explorer to choose from a list.
3. Click the Alphabetic tab to display properties in alphabetic order, or choose the Categorized tab to display object properties by category.

Watch window is used to watch the values of application variables in Break mode. - It enables us to monitor the value for a certain state. - We may want the program execution to pause on an instruction that sets a certain date.

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

The Immediate window evaluates expressions by building and using the currently selected project. To display the Immediate window, open a project for editing, and then choose Debug > Windows > Immediate or press Ctrl+Alt+I. You can also enter Debug. Immediate in the Command window.