**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.

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

**excel?**

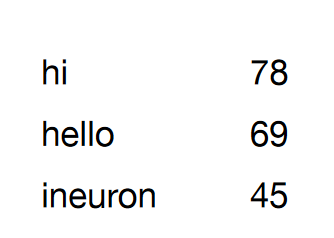
VBA is a version of Visual Basic (a programming language) that can be used to program Microsoft Office apps, such as Excel and PowerPoint. It’s full form is Visual Basic for Applications.

VBA allows users to use built-in functions, as well as user-defined functions. VBA functions work in the same way as formulas in Excel and can be used to perform repetitive tasks. Users can create custom functions for any actions and then access the functions from a cell or a direct reference from a cell.

**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.**

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Steps to record a macro.

1. First select the range, for which you want to record a macro.
2. Go to Developer tab -> Code group -> Record Macro
3. In Record Macro dialogue box, give a name to the macro “BoldTable”, mention the shortcut key “Ctrl + t” and may give a description about the macro.
4. Click on OK
5. Recording has started, so start doing the steps you wanted to be recorded in the macro like make font bold and draw All boundary for the table.
6. Once done. Go to Developers tab -> Click on Stop Recording in the Code group.

**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.

There are various ways to open the Visual Basic Editor in Excel:

1. Using a Keyboard Shortcut: ALT + F11
2. Using the *Developer* Tab -> In *Code* group > *Visual Basic* command
3. Using the Worksheet Tabs: Right Click at Worksheet Tab -> View Code

**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 basic VBE window can be divided in the following 6 components. In reality, **there are more components** (such as the Locals and Watch Windows)

1. Menu bar
2. Toolbar
3. Project Window/Project Explorer

The Project Window is **useful for navigation purposes**. In this section we'll be able to find every single Excel workbook that is currently open. This includes add-ins and hidden workbooks.

1. Properties Window

The Properties Window **displays the properties of the object that is currently selected**in the Project Explorer and allows you to edit those properties.

1. Programming Window / Code Window / Module Window

The Code Window of the Visual Basic Editor is **where your VBA code appears, and where you can write and edit such code**.

1. Immediate Window

The main purpose of the Immediate Window is to **help you noticing errors, checking or debugging VBA code**. The Immediate Window is, by default, hidden. To Unhide it Go to View -> Immediate Window or may use shortcut Ctrl + G

**Watch Window**

When cells are not visible on a worksheet, you can watch those cells and their formulas in the Watch Window toolbar. The Watch Window makes it convenient to inspect, audit, or confirm formula calculations and results in large worksheets. By using the Watch Window, you don't need to repeatedly scroll or go to different parts of your worksheet

**Add cells to the Watch Window**

1. Select the cells that you want to watch.

To select all cells on a worksheet with formulas, on the Home tab, in the Editing group, click Find & Replace, click Go To Special, and then click Formulas.

1. On the Formulas tab, in the Formula Auditing group, click Watch Window.
2. Click Add Watch.
3. Click Add.
4. Move the Watch Window toolbar to the top, bottom, left, or right side of the window.
5. To change the width of a column, drag the boundary on the right side of the column heading.
6. To display the cell that an entry in Watch Window toolbar refers to, double-click the entry.

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

The main purpose of the Immediate Window is to **help you noticing errors, checking or debugging VBA code**. The Immediate Window is, by default, hidden. To Unhide it Go to View -> Immediate Window or may use shortcut Ctrl + G