**Excel Assignment – 16**

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

An Excel macro is **an action or a set of actions that can be recorded, named, saved and executed as many times as required and whenever desired**. By using macros, we are able to automate repetitive tasks associated with data manipulation and data reporting that must be accomplished repeatedly.

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.

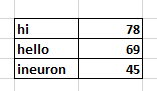
1. What is VBA? Write its full form and briefly explain why VBA is used in excel?

Visual Basic for Application is **a human-readable and editable programming code that gets generated when you record a macro**. Today, it is widely-used with other Microsoft Office applications such as MS-Word, MS-Excel, and MS-Access.

**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. 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.

1. 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.
   * 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.
   * On the Developer tab, Click Recorded macro name Run. Then it will be changed automatically in exel.



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

Microsoft Visual Basic for Applications (VBA) enables non-programmers to record, create, and edit macros that can automate tasks in Office applications.

If you don't see the Developer tab, go to File > Options > Customize Ribbon and make sure that Developer is checked in the right pane. You can also open the VBA editor with the keyboard **shortcut Alt + F11**. As you can see, the VBA editor is packed full of buttons, menus, and options

Go to any of the worksheet tabs, right-click, and select 'View Code'. View code to open the VB Editor.

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

The Visual Basic Editor **displays a menu with the 4 different toolbars and the option to access the Customize dialog**. The toolbars with a checkmark to their left are those currently displayed by Excel. You can add or remove a checkmark in order to display or hide a particular toolbar by clicking on its name.

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.

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 add a watch expression. On the Debug menu, choose Add Watch

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

The Immediate window displays information resulting from debugging statements in your code or from commands typed directly into the window. From the View menu, choose immediate window (CTRL+G).