**Excel Assignment - 16**

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

Answer: Macro is the set of instructions used to execute repetitive tasks. You can record a set of commands and play them back with one or two keystrokes.

Macros save lots of time when we deal with repetitive tasks. For example: if you handle customer accounts at the end of every working day, this would require you to download the latest data from bank and format it to suit your filling requirements. If you do the same routine every day, A macro is the great way to automate the tasks so that you no longer do it manually.

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

Answer: Visual Basic for Application (VBA) is a programming code which is easily read by users and edited as well. It gets generated when macro is recorded. It is widely used in MS-Office applications.

VBA is useful to write the macros with which Mundane and repetitive tasks in huge dataset can be done quickly. Also, it helps financial professionals to analyse and adjust huge amounts of data quickly.

It can be used to create and maintain complex trading, pricing and risk management models, forecast sales and earnings and to generate the financial ratios.

With VBA, Various portfolio management and investment scenarios. This includes filtering through different situations that may impact differently.

It is also used to organise the information for eg. Creating invoicing, forms, charts, analysing the scientific data. It can be used to copy and paste the values, adjust the cell styles for worksheet.

It can be used to interact with users. For example, you may need user’s first and last name to be filled in form. VBA is used to prompt a user in a way that makes this input unavoidably mandatory.

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.

Answer: we need to go to developer tab and click on record macros. A window named record macro will open. We can name the macro as I did. I named it “Format”. Also created shortcut key ctrl +l. Click ok after that.

Then, Do formatting like bolding the data and putting the borders. And then stop the macro.

The next step is to go to another page and insert the data and click ctrl+l , all the formatting would be done automatically.

:A screenshot of a computer

Description automatically generated with medium confidence

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

Answer: Visual Basic Editor is a separate application that is part of excel and opens whenever you open an excel workbook. By default, It is hidden and to access it, you need to activate it. VB editor is the place where you keep the VB code. For example, when we record the macros, it automatically create a new module in VB editor and inserts the code in the module. You can manually type VB code in VB editor as well.

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

Answer: VBA interface has following tabs and options in each tab.

* Menu bar:It had many options like FILE, EDIT, VIEW, INSERT, FORMAT , DEBUG, RUN, TOOLS, ADD-INS, WINDOW, HELP. When we open dropdown menu of each options, there are list of more options and commands.
* Toolbar: It makes some of useful options handy and gives you quick access. There are four toolbars in VB editor – standard, debug, edit, user form.
* Project explorer: It is a window on the left that shows all the objects currently open in excel.
* Code window: There is code window for each object that is listed in the project explorer. Code window is where you will write a code or copy and paste a code from somewhere else.
* Immediate window: It is used when we need to debug the code.
* Properties window: It is window where you get to see the properties of the selected object. If you do not have this window, you can get it by using keyboard shortcut F4. Also, you can go to view tab in menu bar and click properties window. This window allows us to change the properties of selected object. For example: If I want to hide the worksheet. I can do that by changing the visible property of selected worksheet object.
* Watch window: This window opens below the code window. However, you can drag and place it as required. It is hidden by default. Watch window lets you inspect the values stored in selected number of variables or expressions. To display watch window, we can select from view tab in menu bar. We can also click its icon on debug toolbar. Keyboard shortcut ALT+V+H also displays the watch window.

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

Answer: Immediate window opens below the code window, however, you can drag and place it as required. Also, the window is not visible by default. To display the window, you can select it from the view tab from menu bar or click on debug toolbar. This window executes or evaluates a single line of code or expression. In other words, immediate window gives you a snapshot of situation behind the scenes in your code.

It is used to call procedures as you would be in code.

It is used to 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.

It also change or query a property value while running an application.

It views debugging output while program is running.