



## **Objectives**

In this chapter you would be able to learn

- What are macros?
- How to use macros.

You can use macros to automate complex and repetitive tasks. A Macro is a series of instructions that execute automatically with a single command. For example, you can create a macro to format a worksheet or to print a report. You can use the macros already available in Excel or create your own from the Developer Tab.To activate the Developer Tab, Click on File Button, Option and customize Ribbons and enable "Show Developer Tab in Ribbon".

# **Enabling macros**

Macros can contain viruses that can harm your computer. To prevent this problem, by default Excel requires you to enable macros after opening a file that contains them. To enable macros, click More Options in the Security Warning bar that appears, then click Enable this content.

If Windows is set to display file extensions, you can distinguish an Excel file that contains macros from one without them by its filename. A standard Excel file uses the extension .xlsx. An Excel file with macro code uses the extension .xlsm.



## **Trust Center settings**

You can protect your workbook by setting a macro security level. The security levels available are:

- Disable all macros without notification.
- Disable all macros with notification.
- Disable all macros except digitally signed macros
- Enable all macros(Not recommended; Potentially dangerous code can run)

To set the macro security level, click on macro security command in the developer tab. In the trust center dialog that appears, select the security level you want to apply.

## Creating a macro

There are two ways by which you may create a macro

- Recording
- Writing

## Recording a Macro

To record a macro:

- 1) Click Macro Recording in the status bar to open the Record Macro dialog box.
- 2) Specify a name for the macro and a shortcut key. Macro names must begin with a letter and cannot contain spaces. They can include letters, numbers, and underscores.
- 3) Click OK to start recording the macro.
- 4) Perform the actions you want to include in the macro. As you work, Excel records the sequence of steps.

When you're finished, click the Stop Recording button on the status bar.

#### Store In

This field in the Record macro dialog box, specify where the macro to be recorded will be stored. There are three options you can select from.

**Personal Macro Workbook**: This workbook, named PERSONAL.XLS, is automatically opened and hidden, each time you start Excel. This is a good place to store macros that you want available at all times.

**This Workbook**: Place the macro in the active workbook. If there is no active workbook, this option is not available.

**New Workbook**: A new workbook will be created, and the macro will be recorded in it.



# Running a Macro Using Menu Commands

To run a macro, click the Play Macro button in the status bar to open the Macro dialog box, as shown in diagram. Select the macro of your choice, and click the Run button

Macros that are contained on all currently open workbooks are displayed in the list. To run a macro, select macro from the list and click Run. The Macro dialog box provides several additional capabilities:

Step	Click this button to run the macro step by step. Stepping through a macro is useful for debugging purposes
Edit	The module containing the macro is activated, and the macro is displayed in the visual basic editor for editing purposes.
Delete	Deletes the selected macro. (You can also delete macros by activating the module and clearing the macro.)
Options	Lets you assign a shortcut key, add a command to Excel's Tools menu that runs the macro, and change the description of the macro.

#### Viewing the recorded Macro

As mentioned in the table above, from the macro dialog box, we can edit or step into a macro's code. Clicking on either of these options opens the visual basic editor. The visual basic editor layout will open in s separate window.

If you have macros in this workbook, you would see an additional folder in the project explorer called "Modules". All macros in a file are stored in Modules. These modules are by default named as Module1, Module2 etc.