

# Assignment- 8

## Inserting and Formatting Text using Microsoft Excel Macros and VBA

### Overview

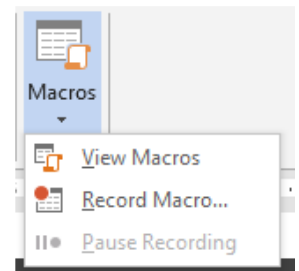
During this Assignment you will utilize Excel's Macro Recorder tool to add and format headers for a simple list in Excel.

East	Technical Support	800	650	700	2150
East	Telephone	900	850	850	2600
East	Copying	4850	3200	1155	9205
East	Overhead	1250	1250	1250	3750
East	Software	2025	2200	1650	5875
East	Maintenance	1350	1500	1700	4550
East	Supplies	3300	3500	3700	10500
East	Telemarketing	3825	3725	3750	11300
East	Contractors	8900	10315	5250	24465
East	Consultants	6250	6000	6500	18750
East	Rent	8000	8000	8000	24000
East	Miscellaneous	11500	12500	12500	36500
East	Advertising	12250	12250	12750	37250
East	Clerical Support	25000	24000	26390	75390

1st Qtr Expense Report					
Division	Category	Jan	Feb	Mar	Total
East	Technical Support	800	650	700	2150
East	Telephone	900	850	850	2600
East	Copying	4850	3200	1155	9205
East	Overhead	1250	1250	1250	3750
East	Software	2025	2200	1650	5875
East	Maintenance	1350	1500	1700	4550
East	Supplies	3300	3500	3700	10500
East	Telemarketing	3825	3725	3750	11300
East	Contractors	8900	10315	5250	24465
East	Consultants	6250	6000	6500	18750
East	Rent	8000	8000	8000	24000
East	Miscellaneous	11500	12500	12500	36500
East	Advertising	12250	12250	12750	37250
East	Clerical Support	25000	24000	26390	75390

### Using the Macro Recorder

Excel's Macro Recorder tool is the fastest way to create automation in Excel. Upon activating the Macro Recorder, Excel will record your actions within the application, writing down each step you take in Visual Basic for Applications (VBA) code. All you need to do is click RECORD MACRO, fill in the options, and start recording any Excel commands that will would like to automate.



#### VIEW – MACROS – RECORD MACRO

##### ➤ MACRO NAME

- Up to 255 Characters
- No Space or Special Characters (@, #, \$, &)
- Don't Start your Macro Name with a numeric value

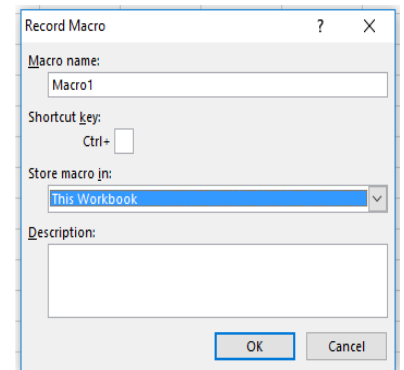
##### ➤ Short-Cut Key

- You can use CTRL + a character or CTRL + SHIFT and a character
- Stay away from using short-cut keys already used by Excel as this will over-ride the default before and will run your macro instead.

##### ➤ STORE MACRO IN

- **This Workbook:** Storing Macro here will give you access to the macro in this workbook, the workbook you are creating the macro in
- **Personal Macro Workbook:** Storing the Macro here will give you access to the macro in any workbook on your system
- **New Workbook:** This creates a new workbook at time of creating the macro and the macro will be available if that workbook is open

- **Description:** Leave some notes behind for yourself and any co-workers that may use your macro.

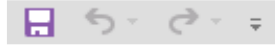


## Running a Macro

There are many ways to run Macros from within Excel. Below are a few ways you can run Macros.

- **Use a Shortcut Key:** The shortcut key is created when you first create the Macro
- **Create a Button on the Worksheet:** Buttons can be added to a worksheet and then tied to a Macro
  - You can find the **COMMAND BUTTON** control on the developer tab within Excel

- **Add a button on the Quick Access Toolbar**

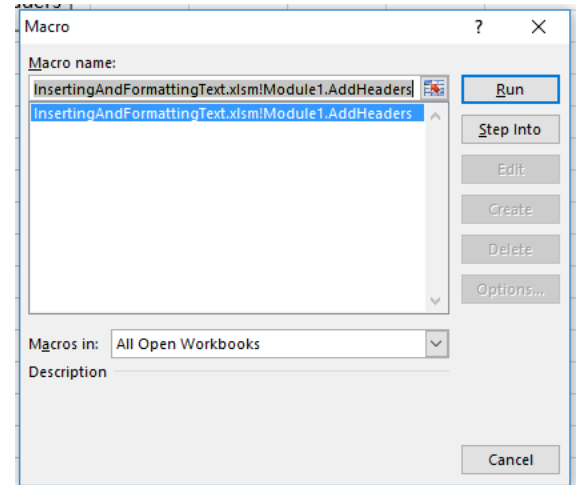


## Editing a Macro (VBE)

In order to edit Macros that you have created using the Macro Recorder tool you must open the **Visual Basic Editor window**.

**VIEW – MACROS – VIEW MACROS – EDIT**

The **Visual Basic Editor** or **VBE** window is where all the code that the Macro Recorder wrote is stored. The code is stored in an object called a **MODULE**.



### Level Up by doing it yourself!

A co-worker has given you an Excel document that contains raw data, a list of expense records. The list contains several pieces of data but is missing the headers for each of its columns and a Worksheet title. Each time you receive one of these documents you have to add the headers and the worksheet title manually. You decide to automate the adding of the column headers and worksheet title by creating a Macro using Excel's Macro Recorder tool.

### RECORD THE MACRO

1. Download and open the file: **InsertingAndFormattingText.xlsx**

**Data URL:** <https://github.com/Learn-With-Karthik/NCPL-DataAnalytics/blob/main/Excel-Data%20Analysis%20using%20VBA/InsertingAndFormattingText%20-%20Macro%20Example.xlsx>

2. Observe the records on the worksheet titled **EAST RECORDS** the list contains data about expenses but is missing the appropriate headers and a Worksheet title

3. Record yourself, using the Macro Recorder tool, add the headers and the worksheet title

4. Goto **VIEW—MACROS – RECORD MACRO**

5. Call the Macro **"AddHeaders"**

6. Add the following headers to the list in ROW 3

- a. Division
- b. Category
- c. Jan
- d. Feb
- e. Mar
- f. Total Expense

7. Add a worksheet title in CELL C1, **"EAST EXPENSE REPORT"**

8. Format the headers and the worksheet title

9. Stop Recording – **VIEW – MACROS – STOP RECORDING**