MS Excel with VBA Course
Macro Hands-On Activity 1

Macro Task 1: Inserting and Naming a Worksheet

1. Choose **Developer | Record Macro**.
2. In the Record Macro dialog box, enter the name <u>Insert_NewSheet</u> for the macro, as shown in Figure 1. Do not dismiss this dialog box until you are instructed to do so.
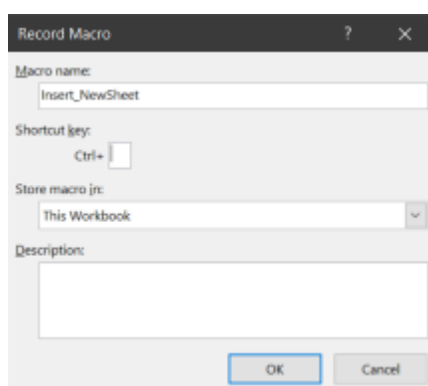

Figure 1

3. Select **This Workbook** in the Store macro in list box.
4. In the Description box, enter the following text: <u>Insert and rename a worksheet</u>.
5. Choose **OK** to close the Record Macro dialog box. The *Stop Recording* button shown in Figure 2 appears in the status bar. Do not click this button until you are instructed to do so. When this button appears in the status bar, the workbook is in the recording mode.
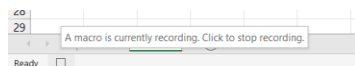

Figure 2

The Stop Recording button remains in the status bar while you record your macro. Only the actions finalized by pressing Enter or clicking OK are recorded. If you press the Esc key or click Cancel before completing the entry, the macro recorder does not record that action.

6. Add a new sheet to the current workbook. You can do this by either rightclicking the Sheet1 tab and choosing **Insert | Worksheet | OK**, or simply clicking the plus button to the right of the Sheet1 tab.
7. Rename the new sheet *Employee Wages*.
8. Click the **Stop Recording** button in the status bar as shown in Figure 2 or choose **View | Macros | Stop Recording**. When you stop the macro recorder, the status bar displays a button that allows you to record another macro (see Figure 3).
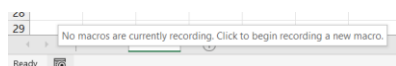

Figure 3

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Macro Task 2 : Inserting Column Headings and Applying Formatting

1. Choose **View | Macros | Record Macro** (or you may click the Begin recording button located in the status bar).
2. Enter <u>Insert_Headings</u> as the name for your macro.
3. Ensure that **This Workbook** is selected in the **Store macro in** list box.
4. Click **OK**.
5. Excel turns on the macro recorder. All your Excel actions from now on are being recorded.
6. Select cell A1 and enter the first heading: <u>Employee Name</u>.
7. Move to cell B1 and enter: <u>First Name</u>.
8. Enter the remaining headings in cells C1: F1 (<u>Last Name</u>, <u>Hourly Rate</u>, <u>Hours Worked</u>, <u>Total Wages</u>).
9. Select A1:F1 and apply the bold formatting to the selection by pressing the B button in the Font group of the Ribbon's Home tab.
10. With the range A1:F1 still selected, choose **Home | Cells | Format | Autofit Column Width**.
11. Click the **Stop Recording** button in the status bar as shown in Figure 2 or choose **View | Macros | Stop Recording**.
12. You have just recorded your second macro. The Employee Wages worksheet should now have the required headings in Row 1.

Macro Task 3 : Entering Employee Data

1. Choose **View | Macros | Record Macro** (or you may click the **Begin recording** button located in the status bar).
2. Enter <u>Insert_EmployeeData</u> as the name for your macro.
3. Ensure that **This Workbook** is selected in the **Store macro in** list box.
4. Click **OK**.
5. Excel turns on the macro recorder. All your Excel actions from now on are being recorded.
6. Enter employee data in columns *A*, *D*, and *E* as shown in Figure 4.

	A	B	C	D	E	F
1	**Employee Name**	**First Name**	**Last Name**	**Hourly Rate**	**Hours Worked**	**Total Wages**
2	James Rogers	James	Rogers	15	7	£ 105.00
3	Martha Lambert	Martha	Lambert	13.4	6	£ 80.40
4	Eugene Zelnik	Eugene	Zelnik	21.42	10	£ 214.20
5	Enrique Martinez	Enrique	Martinez	16.5	11	£ 181.50
6	Wanda Pasterniak	Wanda	Pasterniak	35	21	£ 735.00
7	Bruce Smith	Bruce Smith	Bruce Smith	28.33	14	£ 396.62

Figure 4

7. Leave the First Name, Last Name, and Total Wages columns blank as they will be filled in later.
8. Click the **Stop Recording** button in the status bar as shown in Figure 2 or choose **View | Macros | Stop Recording**.
9. You have just recorded the third macro. The static data entry has been completed. We will now proceed to record macros that use formulas to fill the remaining columns of the worksheet.

Macro Task 4 : Entering Formulas to Fill in Employee First Name

1. Choose **View | Macros | Record Macro** (or you may click the **Begin recording** button located in the status bar).
2. Enter Get_FirstName as the name for your macro.
3. Ensure that **This Workbook** is selected in the **Store macro in** list box.
4. Click **OK**.
5. Excel turns on the macro recorder. All your Excel actions from now on are being recorded.
6. Enter the following formula in cell B2:
   =LEFT(A2,FIND(" ", A2)-1)
7. Copy the formula down to cells B3:B7 by dragging the selection handle in the bottom right corner of cell B2. Excel fills in the fi rst names of all employees.
8. Click the **Stop Recording** button in the status bar as shown in Figure 2 or choose **View | Macros | Stop Recording**.
9. You have just recorded a macro that makes use of a formula to retrieve employee first names from their full name. The next macro will populate the last name column using another formula.

Macro Task 5 : Entering Formulas to Fill in Employee Last Name

1. Choose **View | Macros | Record Macro** (or you may click the **Begin recording** button located in the status bar).
2. Enter Get_LastName as the name for your macro.
3. Ensure that **This Workbook** is selected in the **Store macro in** list box.
4. Click **OK**.
5. Excel turns on the macro recorder. All your Excel actions from now on are being recorded.
6. Enter the following formula in cell C2:
   =RIGHT(A2,LEN(A2)-FIND(" ", A2))
7. Copy the formula down to cells C3:C7 by dragging the selection handle in the bottom right corner of cell C2. Excel fills in the last names of all employees.
8. Click the **Stop Recording** button in the status bar as shown in Figure 2 or choose **View | Macros | Stop Recording**.
9. You have just recorded a macro that makes use of a formula to retrieve employee last names from their full name. We have one more column to fill in before we can apply the final formatting to this worksheet.

Macro Task 6 : Entering Formulas to Calculate Employee Total Wages

1. Choose **View | Macros | Record Macro** (or you may click the **Begin recording** button located in the status bar).
2. Enter <u>CalculateWages</u> as the name for your macro.
3. Ensure that **This Workbook** is selected in the **Store macro in** list box.
4. Click **OK.**
5. Excel turns on the macro recorder. All your Excel actions from now on are being recorded.
6. Select cells F2:F7 and type the formula shown here. Press **Ctrl+Enter** to ensure that formula is entered into the selected range F2:F7.
   =D2*E2
7. Apply Currency format to cells F2:F7.
8. Click the **Stop Recording** button in the status bar as shown in Figure 2 or choose **Developer | Macros | Stop Recording.**
9. In the next macro you will complete the worksheet by applying desired formatting.

Macro Task 7 : Applying Table Format

1. Choose **View | Macros | Record Macro** (or you may click the **Begin recording** button located in the status bar).
2. Enter <u>FormatTable</u> as the name for your macro.
3. Ensure that **This Workbook** is selected in the **Store macro in** list box.
4. Click **OK.**
5. Excel turns on the macro recorder. All your Excel actions from now on are being recorded.
6. Select all data in the Employee Wages worksheet and choose **Home | Styles | Format as a Table.** Select any of the predefined table styles from the dropdown.
7. Select cell A1.
8. Click the **Stop Recording** button in the status bar as shown in Figure 2 or choose **View | Macros | Stop Recording.**
9. You have now completed recording a set of macros that create and format a worksheet.