



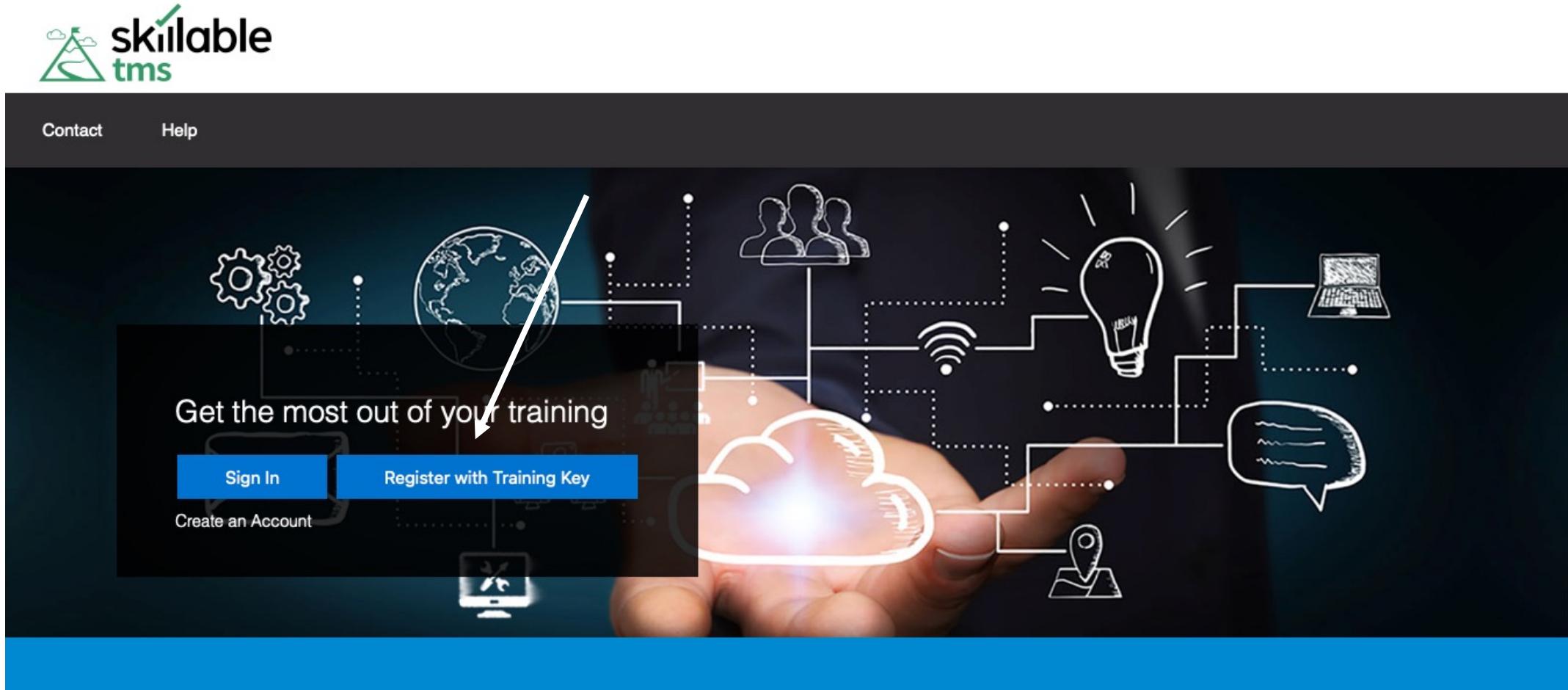
# EXCEL WORKSHOPS-

Advanced Microsoft  
Excel 2016 Training on Skillable VM



# Skillable access

<https://justit.learnondemand.net/User/Login>



Prevent unauthorized  
access when working with  
others



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# Preventing unauthorized access

- Preventing unauthorized access in Excel involves implementing security measures to control who can view, edit, or modify the content of a workbook or specific sheets within it. Below is brief description of some common methods to prevent unauthorized access in Excel:

## Password Protection:

- Excel allows you to password-protect workbooks, worksheets, and even specific cells or ranges. Password protection restricts access to those who know the password. You can set passwords for both opening a workbook and making changes within it.

## Workbook-level Protection:

- You can protect an entire workbook to prevent unauthorized users from opening it without the correct password. This ensures that only authorized individuals can access the workbook's content.

## Worksheet-level Protection:

- Excel enables you to protect specific worksheets within a workbook. By doing so, you can control which sheets are accessible and which remain hidden or locked for editing.

## Cell or Range Locking:

- You can lock specific cells or ranges within a worksheet. This prevents users from modifying the contents of these cells or ranges unless they know the password to unlock them.

# Preventing unauthorized access- Workshop Instructions

- In the first part of this Excel workshop, you will learn how to password protect a workbook, a worksheet, specific ranges in a worksheet, how to track changes, how to accept and reject changes, and how to list all changes on a new sheet.

## Protecting Worksheets and Workbooks

By default, any person who can access a workbook can open it, and if you can open a workbook, you can edit it. Fortunately, Excel offers numerous levels of protection for workbooks and worksheets. The three most common ways to protect data in Excel are:

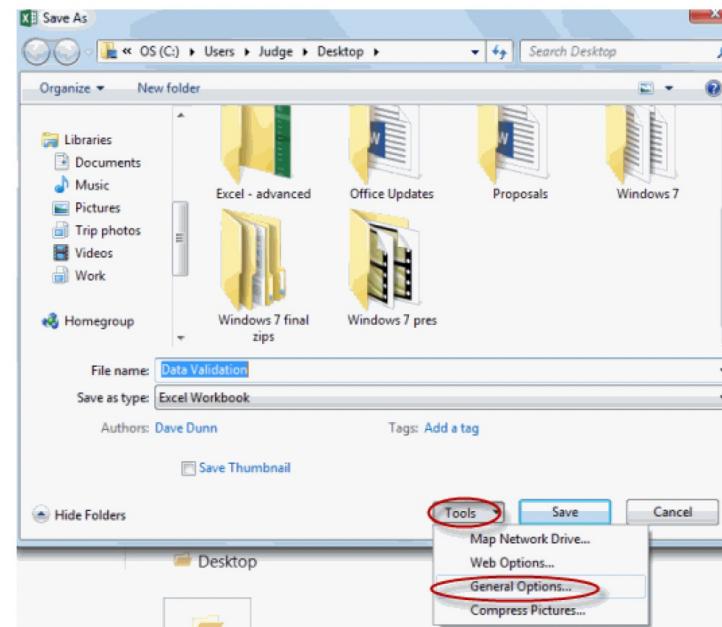
1. **Password protect a workbook.** You can protect your workbook with a password, thereby preventing people who do not know the password from opening or modifying (your choice) the workbook.
2. **Password protect a worksheet.** You can protect individual worksheets with a password. Others can view the sheet, but you determine what, if any, changes they can make without a password.
3. **Password protect ranges in a worksheet.** If you want to allow people to edit some cells in a worksheet, but not others, you can protect the worksheet but leave those cells you want people to edit “unlocked” and, therefore, editable.

# Preventing unauthorized access- Workshop Instructions

## Password Protecting a Workbook

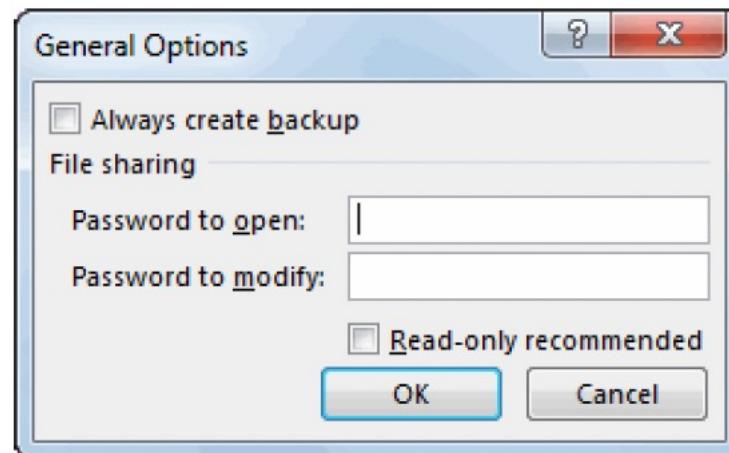
To protect your workbook with a password to prevent people who do not know the password from opening or modifying it:

1. Click **File > Save As** and navigate to where you want to save the file (this step is not necessary in Excel 2007 and 2010):
2. Select where you want to save the file, and in the **Save As** dialog box, click **Tools > General Options**:



# Preventing unauthorized access - Workshop Instructions

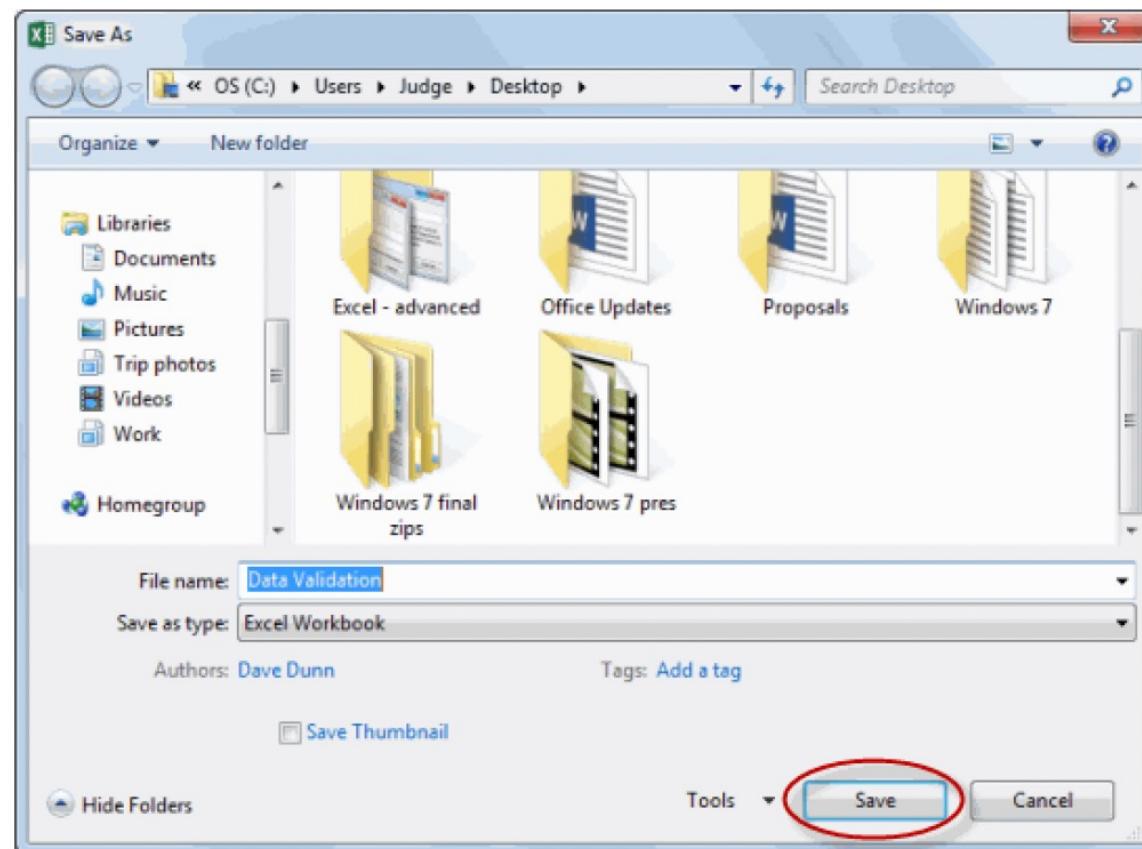
3. Depending on whether you want to prevent others from opening the workbook or just from modifying it, enter a password in either the **Password to open** box or the **Password to modify** box and then click **OK**:



4. In the **Confirm Password** dialog box, reenter the password and then click **OK**

# Preventing unauthorized access- Workshop Instructions

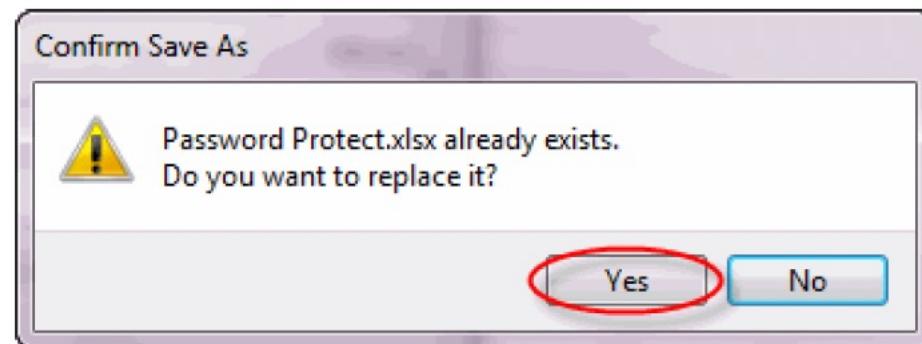
5. Back in the **Save As** dialog box, click **Save**:



# Preventing unauthorized access- Workshop Instructions

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6. If you previously saved the workbook, the **Confirm Save As** dialog box pops up asking if you want to replace the existing workbook. Click **Yes**:



# Preventing unauthorized access- Workshop Instructions

## **Exercise 1: Password Protecting a Workbook**

In this exercise, you will password protect a workbook to prevent people who do not know the password from opening it.

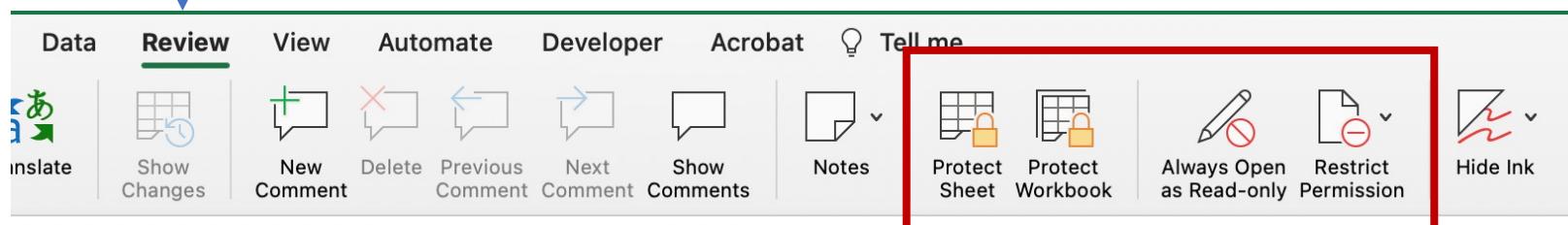
- 1. Open `Password Protect.xlsx` from your `Excel2016.3/Exercises` folder **on Skillable****
2. Save the workbook so that others cannot open it without entering the password “OpenMe!”.

# Preventing unauthorized access

## Password Protecting a Worksheet

To protect a worksheet within a workbook and to determine exactly which changes others can make without a password:

1. Select any cell in the worksheet you want to protect
2. On the Review tab, in the Changes group, click the Protect Sheet command

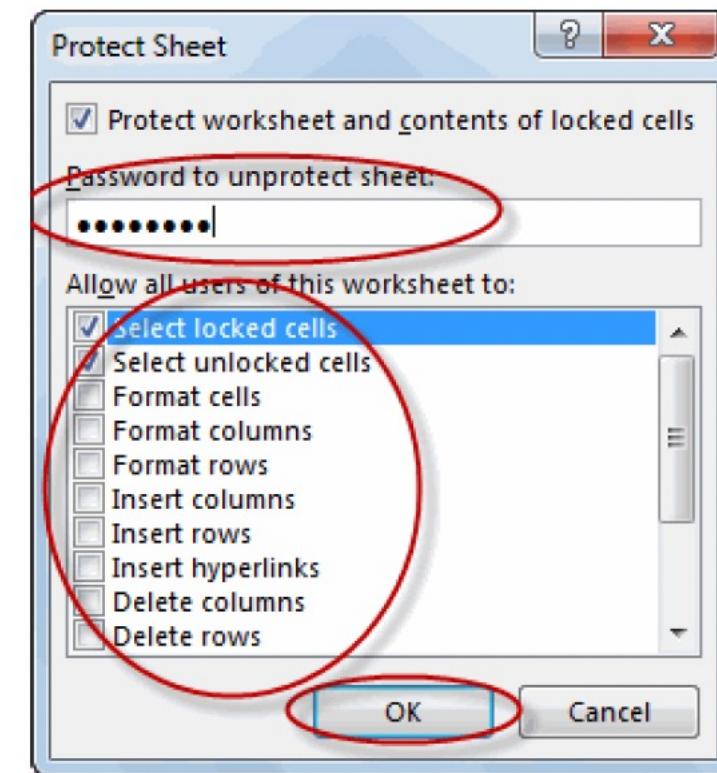


# Preventing unauthorized access

In the **Allow all users** of this worksheet to list, check the boxes for all actions you want users to be able to perform without a password.

Note that by default users can select locked and unlocked cells, meaning users can select cells to see the formulas within, but cannot change them.

If you uncheck these boxes, users will see the worksheet in the same way they would see a picture. After making your selections, enter a password and click **OK**



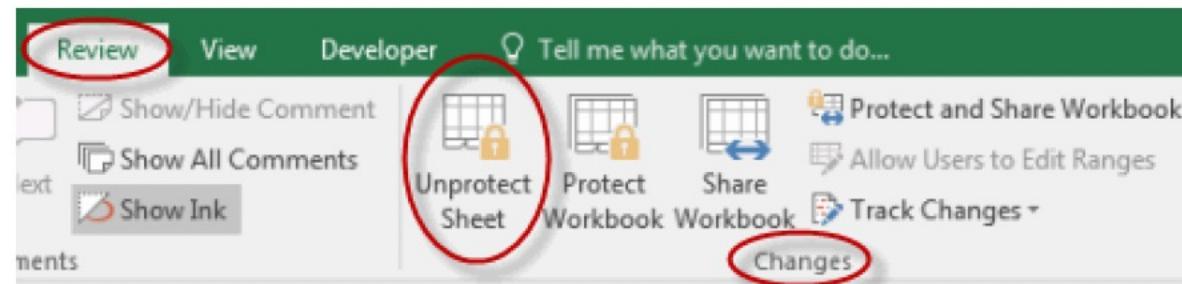
# Preventing unauthorized access

In the **Confirm Password** dialog box, re-enter the password and click **OK**:



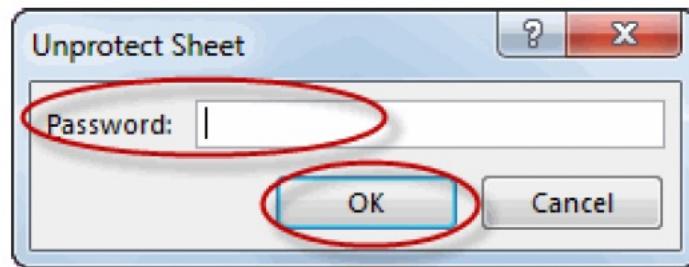
To unprotect the worksheet:

- A. On the **Review** tab, in the **Changes** group, click the **Unprotect Sheet** command (note that this has replaced the **Protect Sheet** command on the toolbar):



# Preventing unauthorized access

In the **Unprotect Sheet** dialog box, enter the password and click **OK**:



# Preventing unauthorized access

- **Exercise 2: Password Protecting a Worksheet**

In this exercise, you will password protect a worksheet to prevent people who do not know the password from editing it.

1. **Open Protecting Worksheets.xlsx** from your Excel2016.3/Exercises folder **on Skillable**.
2. Protect the worksheet named Loans with the password NoEdits. Allow users to:
  - A. Select locked and unlocked cells.
  - B. Format cells, rows, and columns.
  - C. Use **AutoFilter**.

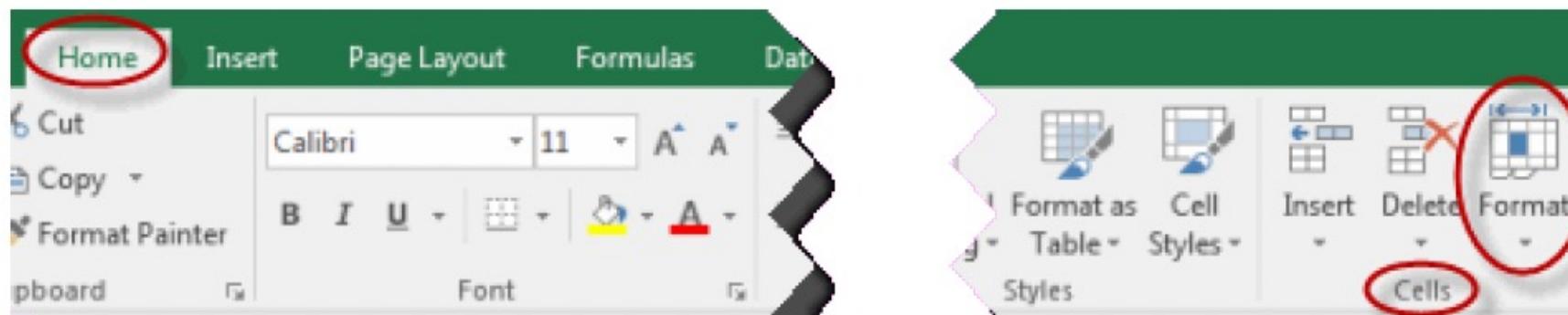
# Preventing unauthorized access

## Password Protecting Ranges in a Worksheet

By default, when you protect a worksheet, all cells in the worksheet are “locked,” meaning they cannot be edited. However, you can “unlock” some cells in a worksheet before protecting it, thus allowing users to edit those, and only those, cells. This is a two step process:

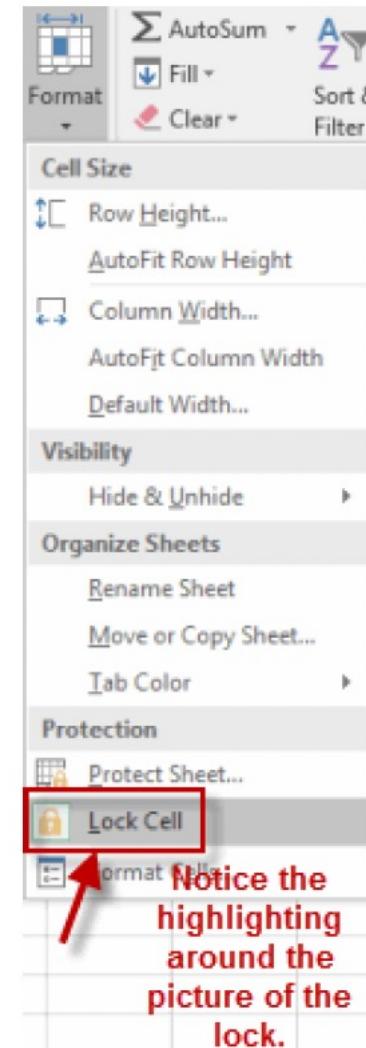
1. Unlock cells you want people to be able to edit without a password. To do so:

- A. Select the cells you want to "unlock."
- B. On the **Home** tab, in the **Cells** group, click the **Format** command:



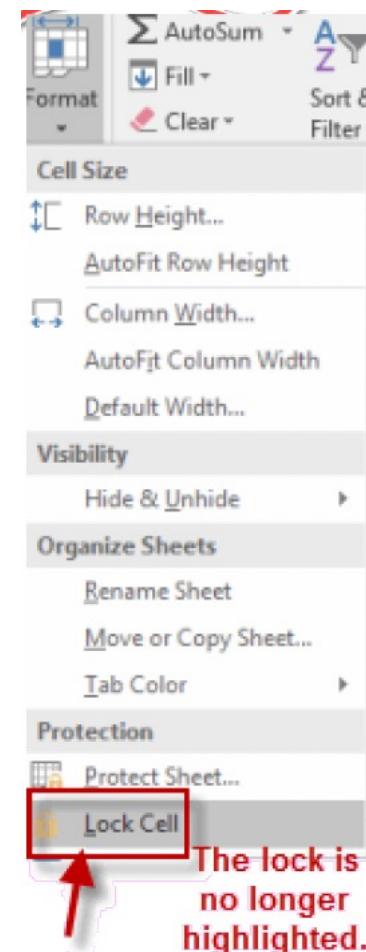
# Preventing unauthorized access

Note that the image of a lock is highlighted.  
Click **Lock Cell** to unlock the cells:



# Preventing unauthorized access

Click the **Format** command again and note that the image of a lock is no longer highlighted, indicating that the selected cells are now unlocked:



Press **Escape**.

Protect the worksheet (see instructions provided earlier in this lesson).

# Preventing unauthorized access

## **Exercise 3: Password Protecting Ranges in a Worksheet**

In this exercise, you will unlock cells in a worksheet before protecting it, thus allowing users to edit much of the worksheet, but protecting the formulas and structure of the worksheet.

- 1. Open Protecting Ranges in a Worksheet.xlsx from your Excel2016.3/Exercises Folder from Skillable.**
2. Protect the worksheet so that users can edit cells D2:D5 (Periods), but cannot edit anything else.

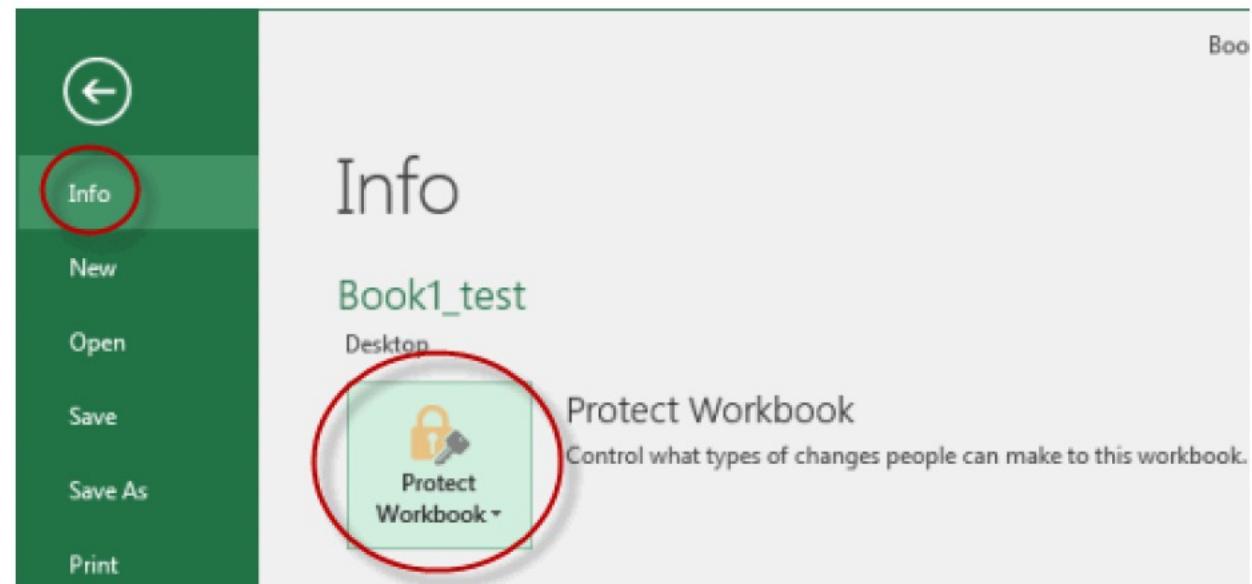
# Preventing unauthorized access

## Marking a Workbook as Final

You can mark a workbook as final to discourage others from editing it.

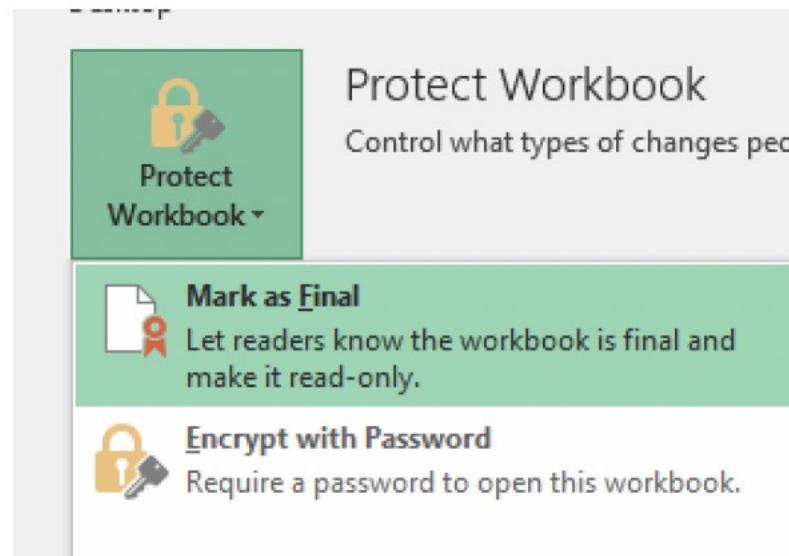
To mark a workbook as final:

1. Select the **File** menu tab, and from the **Info** section, in the **Protect Workbook** section, click **Protect Workbook**.

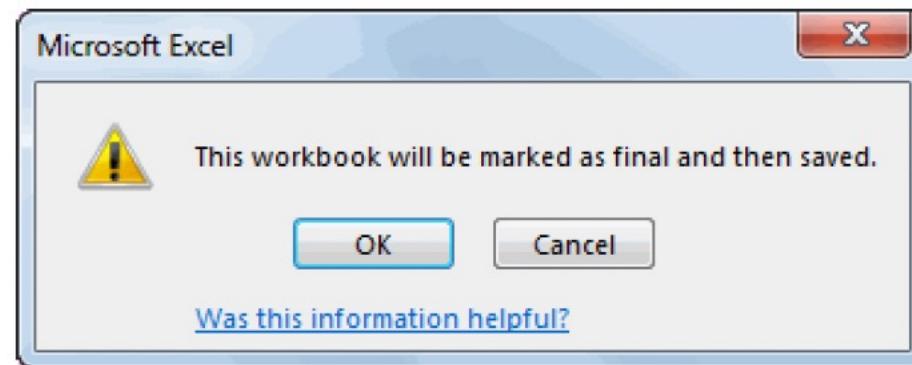


# Preventing unauthorized access

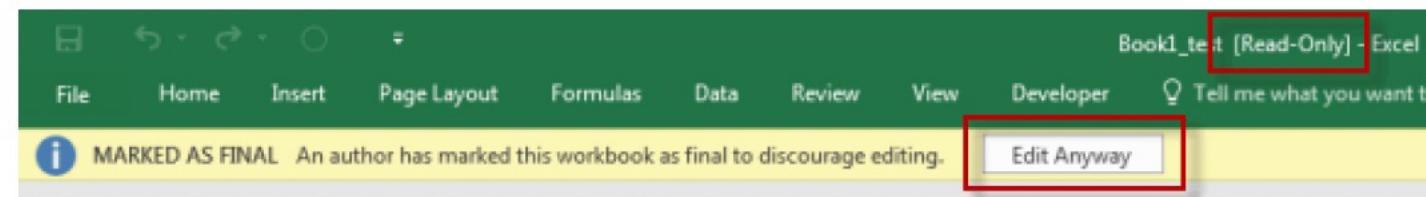
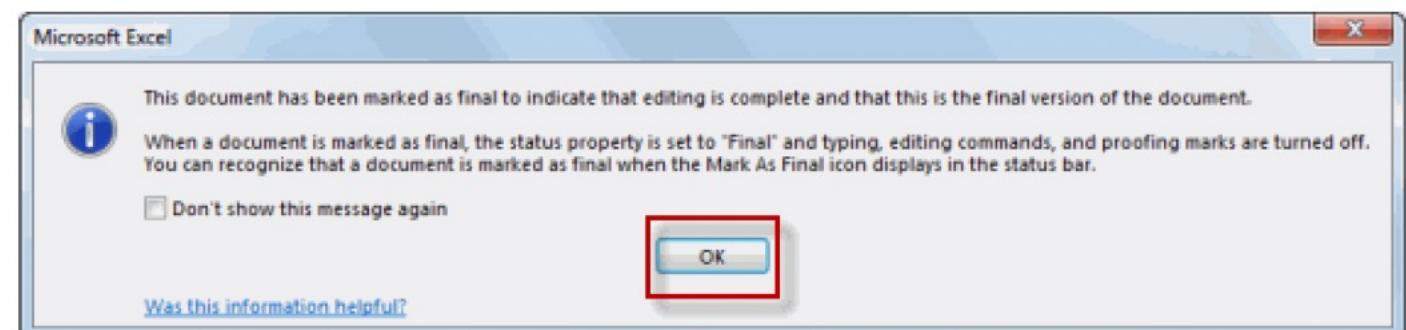
2. Select **Mark as Final** from the drop-down list.



Click OK in the dialog box.



The workbook is now read-only and the following appears:



# Data Validation



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# Data Validation

- **Data validation** is a process used in data management and spreadsheet applications as Excel to ensure the accuracy, consistency, and integrity of data entered into a database or spreadsheet. It involves defining rules and restrictions that data must meet before it is accepted or saved. Below is a brief summary of data validation:

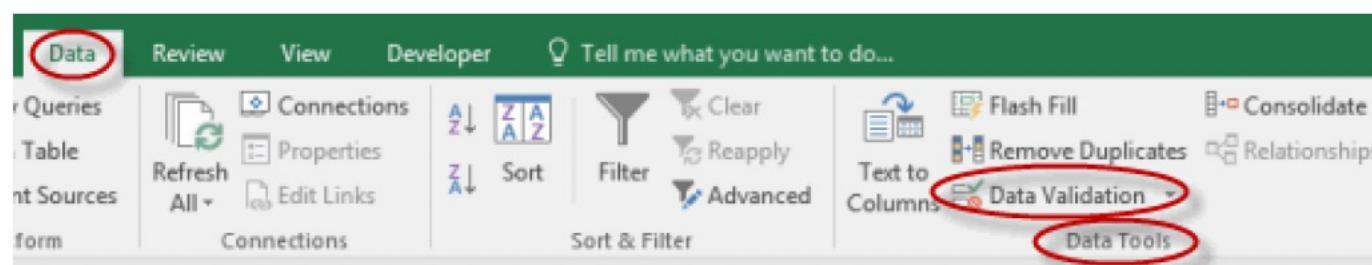
**Purpose:** Data validation is used to prevent errors, inconsistencies, and invalid entries in databases, spreadsheets, and other data repositories. Its primary purpose is to maintain data quality and reliability.

**Validation Rules:** Data validation rules can include checks for data type, range, length, format, and logical conditions.

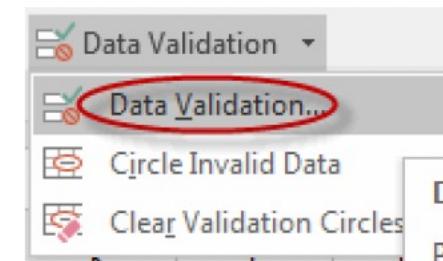
**Error Prevention:** Data validation helps prevent data entry errors and ensures that users provide accurate and meaningful information. It reduces the need for data cleaning and correction after data entry.

# Data Validation Workshop Instructions

- To apply data entry restrictions:
- 1. Select the cells for which to verify data.
- 2. On the **Data** tab, in the **Data Tools** group, click the **Data Validation** command:

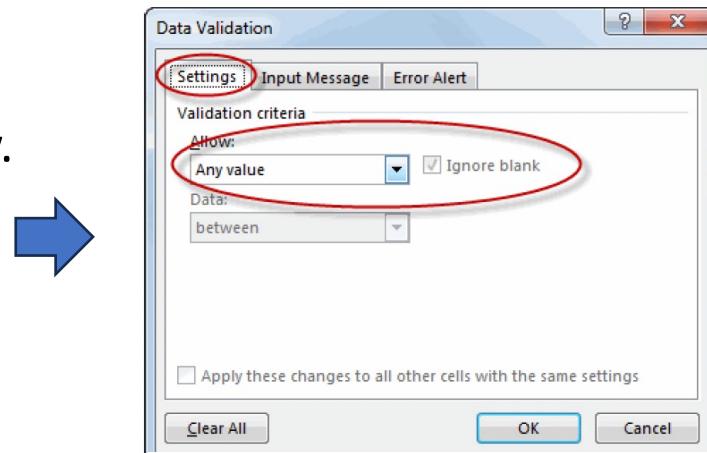


- 3. Click **Data Validation**:

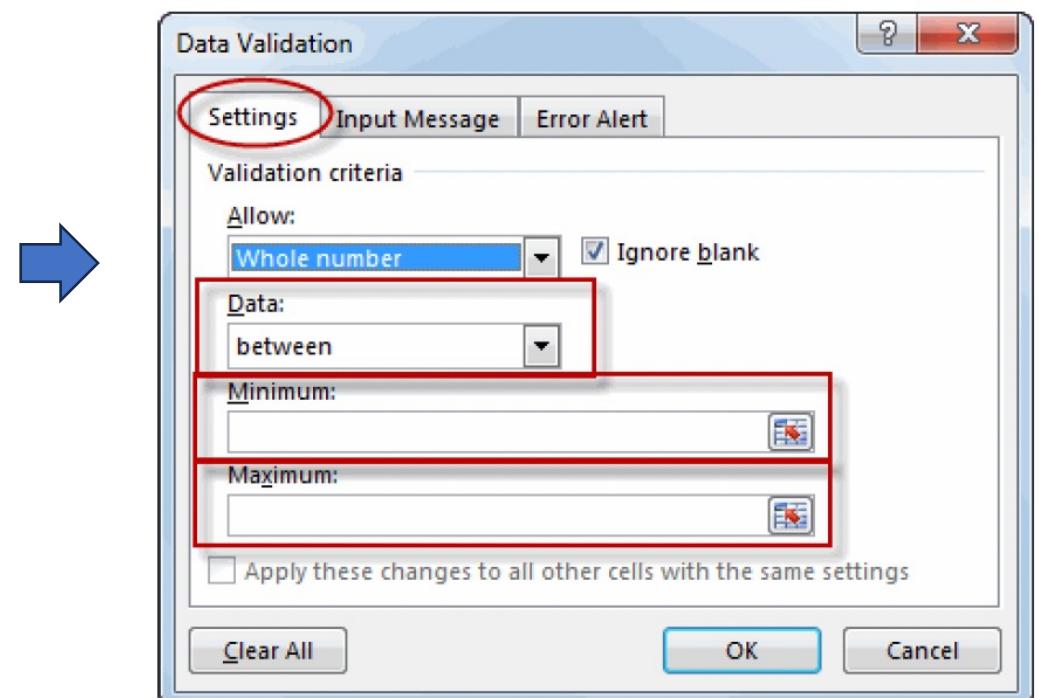


# Data Validation Workshop Instructions

- 4. In the **Data Validation** dialog box:
- A. On the **Settings** tab, choose which types of values to allow.

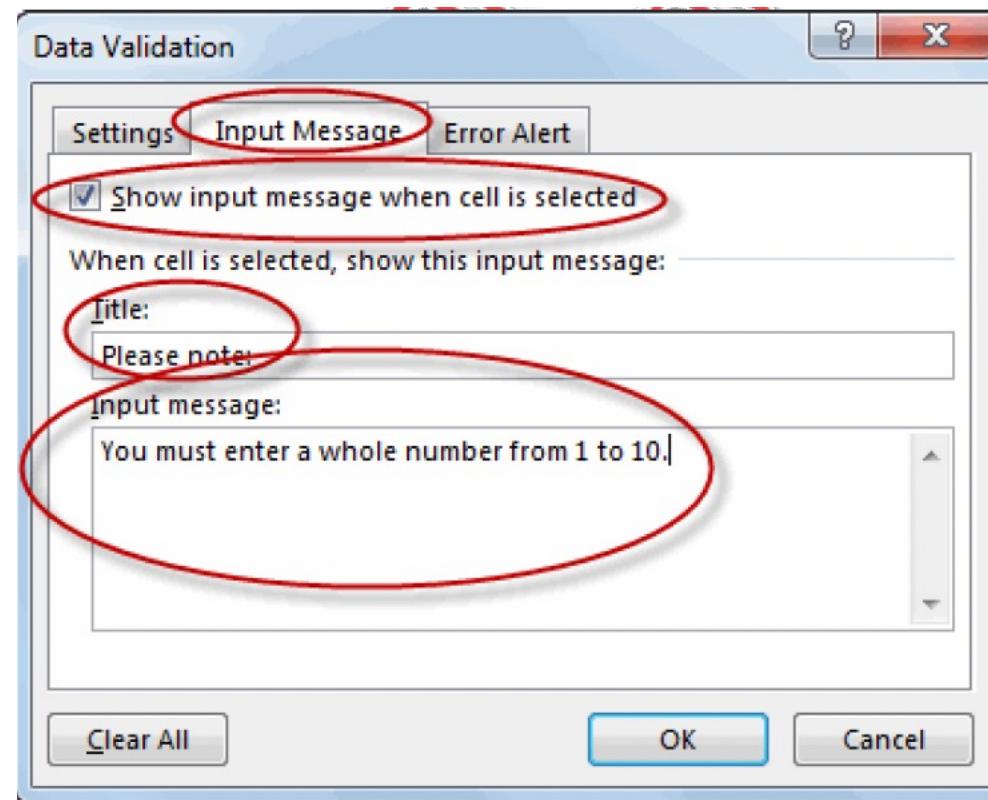


- B. Note that when you select a type of value to allow, the **Data** options change accordingly.
- Set the criteria (**between**, **greater or less than**, **equal to**, **Source**, etc.) for those values. You can type the criteria or select it by clicking the red arrows to the right of the data entry boxes. If you are only allowing values from a list, you must click the red arrow and select the source.



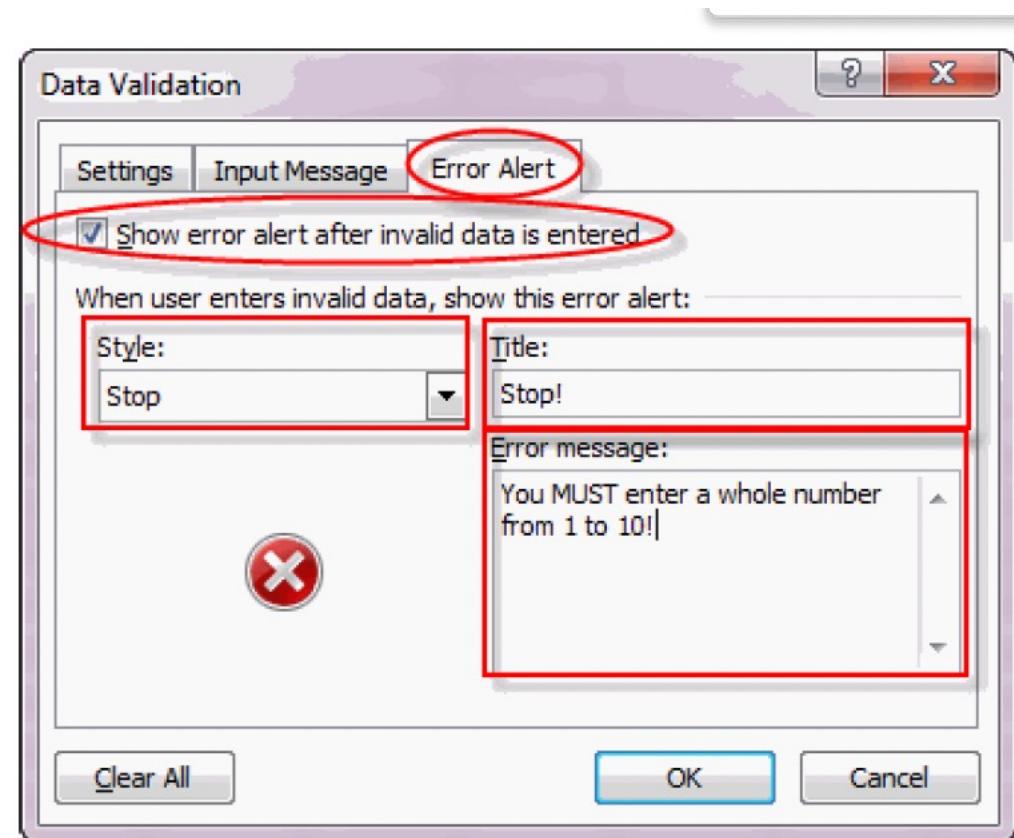
# Data Validation Workshop Instructions

- C. If you want to, you can enter a message telling the person entering the data what the restrictions are. They will see this message when selecting any of the cells for which the restriction has been set. To enter this message, select the **Input Message** tab, make sure that **Show input message when cell is selected** is checked, and enter the **Title** and **Input message**:



# Data Validation Workshop Instructions

- D. You also have the option of entering an error alert that pops up when invalid data is entered. To enter an error alert, select the **Error Alert** tab, make sure that **Show error alert after invalid data is entered** is checked, and enter the **Style** (choose to stop the person from entering the data, warn them that this data does not meet the criteria, or simply let them know), **Title**, and **Input message**:
- Click OK



# Data Validation Workshop Instructions

- **Exercise 1: Using Data Validation**

- In this exercise, you will practice using **Data Validation** to restrict the data that can be entered in specific cells in a worksheet.
- 1. Open **Data Validation.xlsx** from your Excel2016.3/Exercises folder **in Skillable**.
- 2. Use the **Data Validation** command to restrict the data that can be entered into cells C2:C17 to the list of salespeople on the sheet named “Salespeople”.
- 3. Use **Data Validation** to restrict the data that can be entered into cells D2:D17 to a date in 2012.
- 4. Use **Data Validation** to restrict the data that can be entered into cells E2:E17 to the list of territories on the sheet named “Territories”. Enter an **Input Message** and an **Error Alert** to help the person entering data.

# Plenary- so today we have looked at how to ...

- Working with data and Making Calculations using built-in function of Excel
- Security :
  - Prevent unauthorized users from opening or modifying workbooks
  - Control the changes users can make to workbooks
  - Data Validation to ensure data integrity

