Chapter 10: Conditional formatting

Objectives:

This chapter would teach you how to

- Highlight data based on conditions.
- How to specify complex criteria for highlighting data.

When data needs to be formatted based on certain conditions, we may use conditional formatting. It is easy to highlight cells or range of cells, emphasize unusual values, and visualize data by using data bars, color scales or icon sets. Conditional Formatting changes the appearance of a cell range, based on a condition (or criterion). If the condition is true, the cell range is formatted based on that condition. If the conditional is false, the cell range is not formatted.

You can select any of the following types of formatting, as per requirement

- Format all cells by using a two-color scale
- Format all cells by using a three-color scale
- Format all cells by using data bars
- Format all cells by using an icon set
- Format only cells that contain text, number, or date or time values
- Format only top or bottom ranked values
- Format only values that are above or below average
- Format only unique or duplicate values
- Compare table columns to determine which cells to format
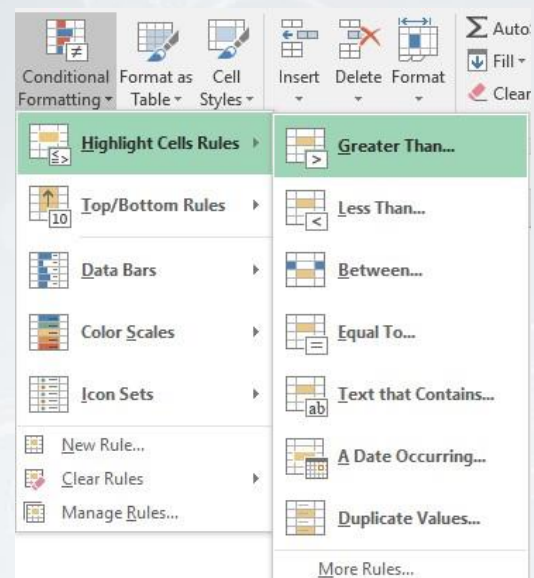- Use a formula to determine which cells to format

Figure 10.1

- Clear conditional formats

For example, you can highlight in green, all sales figures that exceed 75,000. Conditional Formatting can be applied based on a cell value or a formula.

Note: The area that you select before applying Conditional Formatting decides the area in the worksheet to which the format would be applied.

Conditional Formatting using Cell Values (Column Based Conditional Formatting)

To use conditional formatting to apply shading based on cell values, **1)** Select the cells to which you want to apply the Conditional Shading.

2) Activate the Sheet ribbon tab.
3) In the Style group, click Conditional Formatting.
4) From the gallery that appears, select Highlight Cell Rules.
5) From the menu, select a condition for the value in the cell or select More Rules.
6) Specify a condition and cell shading. **7)** Click OK to apply the format.

Conditional Formatting using Formula (Record Based Conditional Formatting)

To apply conditional formatting based on formulas,

1) Select the cells to which you want to apply the formatting.
2) In   the   Style   ribbon group, click   Conditional Formatting.
3) From the menu, select Conditional Formatting Rules Legend to open the Formatting Rules Legend dialog box.
4) Click New Rule to open the Add Formatting Rule dialog box.
5) In the Select a Rule Type box, select Use a formula to determine which cells to format.
6) In the Format values where this formula is true box, enter a formula that evaluates a value to be True or False.
7) Click Format to open the Format Cells dialog box.
8) In the Format Cells dialog box, specify the format in which the cells satisfying the condition should appear, and click OK.
9) Click OK to close the Add Formatting Rule dialog box.
10) Click OK to close the Formatting Rules Legend dialog box and apply the format.

Note: If the format needs to be applied on the entire database, select the database with or without the header before applying conditional formatting. However, the formula should be applied to the first row in selection.

Example
Figure 10.b depicts the formula to highlight the records of everyone in the **sales** department if the selection is along with the column headers.

To highlight the records of the person who earns the highest salary, we need to use the following formula if we have selected the database without the header.

=$h2=max($H$2:$H$101)

However if the selection is along with the header, the formula would be,

=$h1=max($H$2:$H$101)

Icon Set

In Excel 2016, you have access to more icon sets, including triangles, stars, and boxes. You can also mix and match icons from different sets and more easily hide icons from view—for example, you might choose to show icons only for high profit values and omit them for middle and lower values.

Formula with multiple conditions

If we want to highlight only Sales Department from East region, we

can change the formula

1. Select the entire data without heading

2. Click on Home Tab - Conditional Formatting – New Rule

3. Select use a formula to determine with cell to format

4. Type the formula as follows: =AND($D2="Sales",$E2="East")

5. Choose the desired format and click on OK

Apply Conditional Formula based on different sheet's cell reference

Suppose we want to highlight the records by using the cell reference of other sheet in the below given database.

1. Select the entire data without heading
2. Click on **Home Tab** - **Conditional Formatting** – **Manage Rule.**
3. Click On **New Rule.**

4. Select the Rule types as "**Use a formula to determine which cell to format".**

5. In the Edit Rule description, type the formula as:
    =$D2='cross sheet'!$B$2

Choose the desired format and click on OK.