Topic 05: Conditional Formatting in Excel

Conditional Formatting (CF) is a powerful tool in Excel that allows you to format cells based on specific criteria. Instead of manually applying styles or formatting to cells, you can set rules that automatically change the appearance (color, font, border, etc.) of cells when they meet certain conditions. This feature is especially useful for visualizing data trends, highlighting important values, or identifying outliers.

Key Features of Conditional Formatting:

- **Cell Color**: Change the background color of a cell.
- **Font Color**: Change the font color of text.
- **Data Bars**: Add bars to cells to represent the relative value.
- **Color Scales**: Color the cells using a gradient scale (e.g., green to red).
- **Icon Sets**: Display icons (arrows, circles, etc.) based on values.
- **Custom Formatting**: Apply custom formatting based on formulas.

Types of Conditional Formatting

1. **Highlight Cells Rules**
   These are basic rules for highlighting cells that meet certain criteria (greater than, less than, between, equal to, etc.).
   - **Greater Than**
   - **Less Than**
   - **Equal To**
   - **Text that Contains**
   - **A Date Occurring**
   - **Duplicate Values**
2. **Top/Bottom Rules**
   These rules highlight the top or bottom values in a range, such as top 10 items or bottom 10%.
   - **Top 10 Items**
   - **Bottom 10 Items**
   - **Top 10%**
   - **Bottom 10%**
3. **Data Bars**
   Adds a visual bar to each cell to represent the value relative to others in the same range.
4. **Color Scales**
   Applies a gradient color to cells where the color intensity corresponds to the cell value.
5. **Icon Sets**
   Displays icons (such as arrows or traffic lights) based on the value of the cell.
6. **Use a Formula to Determine Which Cells to Format**
   Allows for more complex and flexible conditional formatting using a formula to define the rule.

Step-by-Step Guide: Using Conditional Formatting

1. Highlight Cells Based on a Condition

Let’s say you have a list of sales values, and you want to highlight sales figures greater than $500.

- **Step 1**: Select the cells you want to apply conditional formatting to (e.g., A2:A10).
- **Step 2**: Go to the **Home** tab on the Ribbon.
- **Step 3**: In the **Styles** group, click on **Conditional Formatting**.
- **Step 4**: Choose **Highlight Cells Rules** > **Greater Than**.
- **Step 5**: Enter `500` in the value box and select a formatting style (e.g., light green fill with dark green text).
- **Step 6**: Click **OK**.

Now, any cell in the selected range that has a value greater than 500 will be highlighted.

2. Using Data Bars for Visualization

- **Step 1**: Select the range of cells (e.g., B2:B10) where you want to apply data bars.
- **Step 2**: Click **Conditional Formatting** on the Ribbon.
- **Step 3**: Choose **Data Bars**, then select the style of data bars (e.g., Gradient Fill or Solid Fill).
- **Step 4**: Excel will automatically apply data bars, with the longest bars corresponding to the largest values.

3. Using Color Scales to Represent Values

Suppose you want to color code sales values where low sales are red, medium are yellow, and high sales are green.

- **Step 1**: Select the cells (e.g., B2:B10).
- **Step 2**: Go to **Conditional Formatting** > **Color Scales**.
- **Step 3**: Select a color scale (e.g., Red-Yellow-Green Color Scale).

The color scale will apply a gradient from red (low values) to green (high values), making it easy to spot the highest and lowest values.

4. Icon Sets for Quick Evaluation

You can use icons to represent data. For example, arrows to show growth, decline, or no change.

- **Step 1**: Select the range of cells (e.g., C2:C10).
- **Step 2**: Go to **Conditional Formatting** > **Icon Sets**.
- **Step 3**: Select an icon set (e.g., 3 Traffic Lights (R-Y-G)).
- **Step 4**: Customize the rule by right-clicking on any cell and selecting **Edit Rule**. You can set conditions like "Above Average", "Below Average", etc., to control which icon appears.

5. Custom Formatting Using a Formula

For more complex rules, you can create a formula. For example, highlight cells where the sales value in column B is greater than the corresponding target value in column C.

- **Step 1**: Select the cells (e.g., B2:B10).
- **Step 2**: Click **Conditional Formatting** > **New Rule**.
- **Step 3**: Choose **Use a formula to determine which cells to format**.
- **Step 4**: Enter the formula:
- `=B2>C2`
- **Step 5**: Choose a format (e.g., green fill color).
- **Step 6**: Click **OK**.

Now, any cell in column B where the value is greater than the corresponding value in column C will be highlighted in green.

Example: Sales Performance Dashboard

Let's imagine you have a sales table, and you want to highlight the following:

- **Top 10 Sales** in green.
- **Sales below target** (e.g., sales less than $300) in red.
- **Sales equal to or above target** in yellow.

Salesperson	Sales ($)	Target ($)
John	450	400
Mary	500	450
Steve	250	300
Sarah	350	350
James	600	500

Step-by-Step Application:

1. **Highlight Top 10 Sales**:
    - Select the **Sales ($)** column (B2:B6).
    - Go to **Conditional Formatting** > **Top/Bottom Rules** > **Top 10 Items**.
    - Choose the formatting style (e.g., green fill).
2. **Highlight Sales Below Target**:
    - Select the **Sales ($)** column (B2:B6).
    - Go to **Conditional Formatting** > **Highlight Cells Rules** > **Less Than**.
    - Enter `300` in the value box and choose red fill.
3. **Highlight Sales Above or Equal to Target**:
    - Select the **Sales ($)** column (B2:B6).

- Go to **Conditional Formatting** > **New Rule** > **Use a formula to determine which cells to format**.
- Enter the formula:
- `=B2>=C2`
- Choose yellow fill.

Managing Conditional Formatting

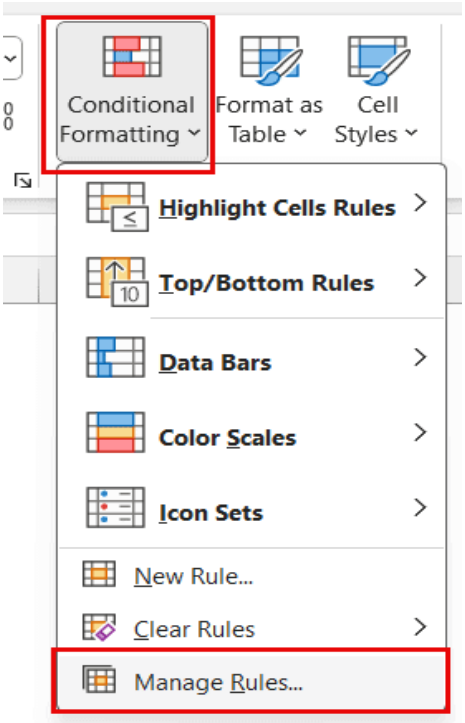
- **View or Edit Rules**: Go to the **Home** tab > **Conditional Formatting** > **Manage Rules**. Here, you can edit, delete, or create new rules.
- **Clear Formatting**: To remove all conditional formatting from a range, go to **Conditional Formatting** > **Clear Rules** > **Clear Rules from Selected Cells** or **Clear Rules from Entire Sheet**.

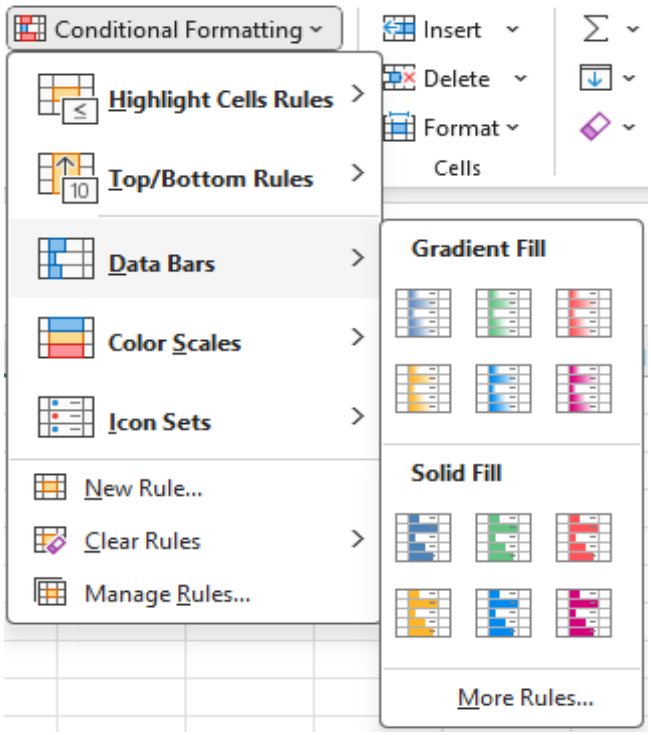
Summary:

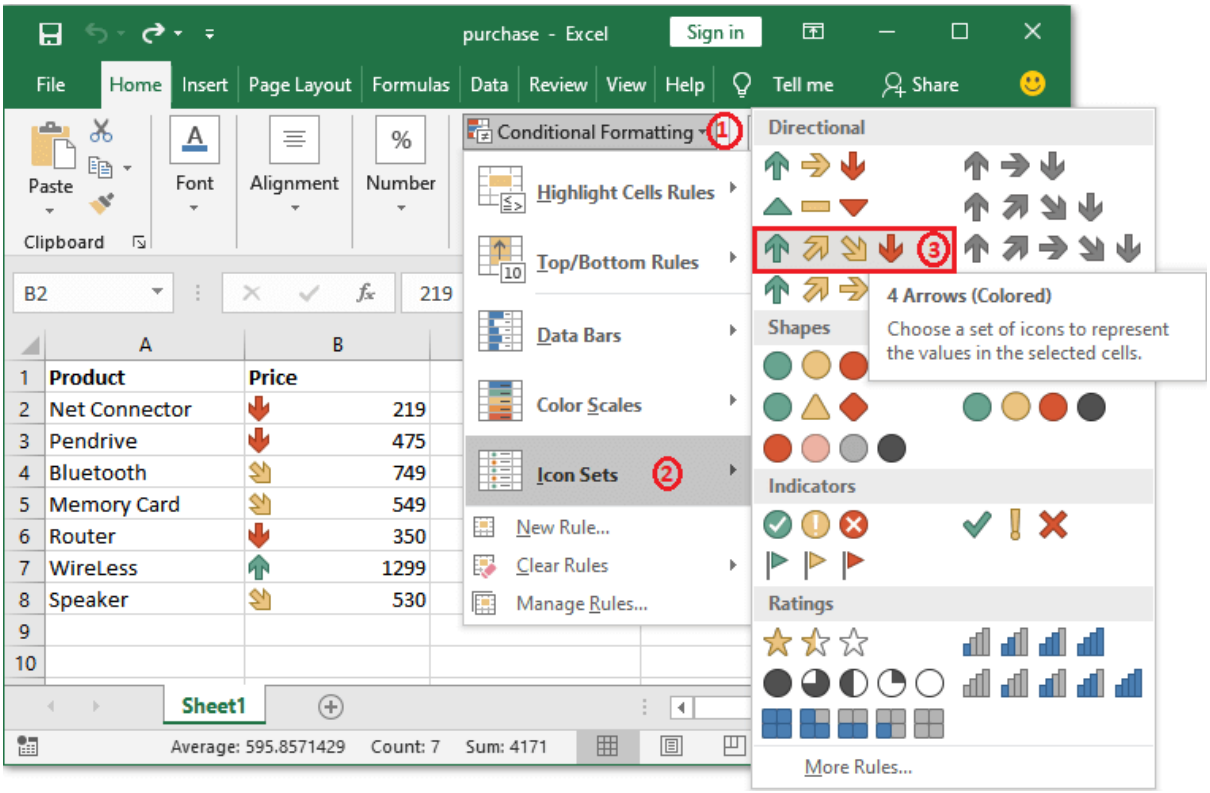
Conditional Formatting in Excel is a powerful tool for visualizing data and highlighting important trends. By setting rules based on conditions, you can automatically change the appearance of cells, making it easier to analyze and interpret your data. The most common uses include:

- Highlighting cells based on their values.
- Using data bars, color scales, and icon sets for visual impact.
- Applying complex formulas for custom formatting.

This tool enhances the readability of your data and improves decision-making by drawing attention to key values or trends in your dataset.



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Sign in
File
Home
Insert
Page Layout
Formulas
Data
Review
View
Help
Tell me
Share
Paste
Clipboard
Font
Alignment
Number
Conditional Formatting
Highlight Cells Rules
Top/Bottom Rules
Data Bars
Color Scales
Icon Sets
New Rule...
Clear Rules
Manage Rules...
Directional
Shapes
Indicators
Ratings
More Rules...
4 Arrows (Colored)
Choose a set of icons to represent the values in the selected cells.
B2
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Product
Price
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Pendrive 475
Bluetooth 749
Memory Card 549
Router 350
WireLess 1299
Speaker 530
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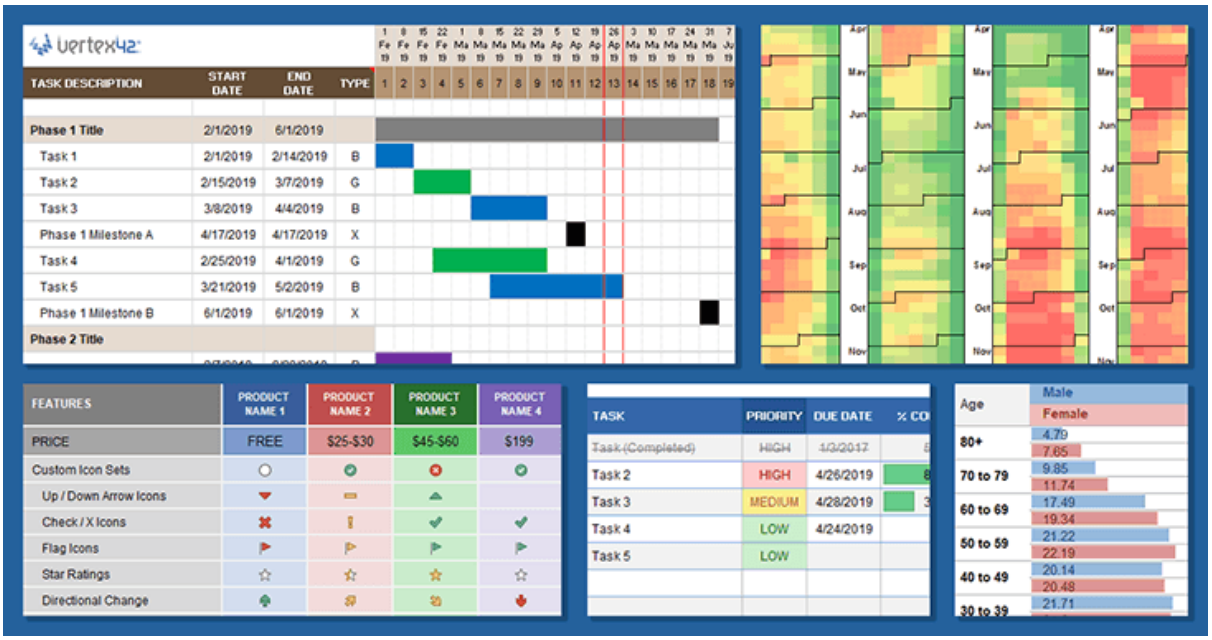
Count: 7
Sum: 4171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Task 2
Task 3
Phase 1 Milestone A
Task 4
Task 5
Phase 1 Milestone B
Phase 2 Title
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PRODUCT NAME 2
PRODUCT NAME 3
PRODUCT NAME 4
PRICE
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$25-$30
$45-$60
$199
Custom Icon Sets
Up / Down Arrow Icons
Check / X Icons
Flag Icons
Star Ratings
Directional Change
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DUE DATE
Task 2
HIGH
4/26/2019
Task 3
MEDIUM
4/28/2019
Task 4
LOW
4/24/2019
Task 5
LOW
Age
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Female
80+
70 to 79
60 to 69
50 to 59
40 to 49
30 to 39