

# Microsoft Excel 2013 Ranges & Tables

University Information Technology Services

Training, Outreach, Learning Technologies and Video Production

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# **University Information Technology Services**

# **Microsoft Office Excel 2013**

# Ranges & Tables

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#### Introduction

Excel 2014 – Ranges and Tables, is a continuation of the fundamentals learned in the previous Excel workshops and builds on this foundation to provide the user with the necessary skills to create more detailed and extensive spreadsheets, and enhance their impact while building your skill with the program.

## **Learning Objectives**

- Edit and format large areas of a spreadsheet.
- Effectively sort and arrange Data.
- Create and format Tables to better organize data.
- Using Conditional Formatting to highlight trends within data.

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#### **Using Ranges**

Working with a range allows you to perform operations such as moving, copying, or formatting much faster than working with one cell at a time. *Figure 1* contains terms and definitions encountered when using ranges.

| Term        | Definition   |
|-------------|--|
| Range       | A group of cells.  |
| Name Box    | Allows you to enter a name for a range.                    |
| Formula Bar | A bar at the top of the Excel window that you use to enter |
|             | formulas.  |

Figure 1 - Definitions

#### **Selecting a Range**

The following explains how to select a range.

- 1. Click on the first cell that you wish to select.
- 2. Highlight the cells that you want to include in the range (see Figure 2).

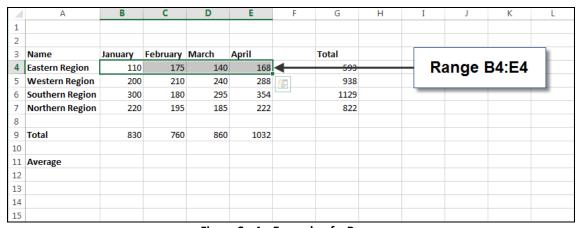


Figure 2 - An Example of a Range

# Naming a Range

A range can also be defined by giving a "name" to a group of cells. For example, we could name cells B4 through E4 as, "Eastern\_Region" by doing the following:

1. Highlight cells B4 through E4.

2. Click in the Name Box (see Figure 3).

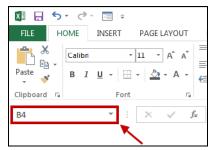


Figure 3 - The Name Box

3. Type "Eastern\_Region" and press the *Enter* key. **Note:** When typing into the name box, your preferred name cannot have any spaces (see Figure 4).



Figure 4 - Eastern\_Region

4. "Eastern\_Region" will appear in the namebox when you select cells B4:E4 (see Figure 5).

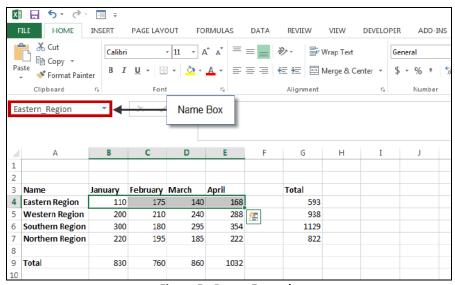


Figure 5 - Range Example

#### **Copying and Pasting a Range**

The following explains how to copy and paste a range:

1. Highlight the cell range that you wish to copy (see Figure 6).

| Name            | January | February | March | April | May |
|-----------------|---------|----------|-------|-------|-----|
| Eastern Region  | 110     | 175      | 14    | 168   |     |
| Western Region  | 200     | 210      | 24    | 288   |     |
| Southern Region | 300     | 180      | 29.   | 354   |     |
| Northern Region | 220     | 195      | 18    | 222   |     |

Figure 6 - Select your Range

2. On the *Home* tab of the ribbon, click on the **Copy** button (see Figure 7).

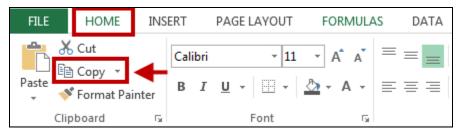


Figure 7 - Copy

3. Left-click in the beginning cell where you want the range to be copied (see Figure 8).

| Name            | January | February | March | April | Mav      |
|-----------------|---------|----------|-------|-------|----------|
| Eastern Region  | 110     | 175      | 140   | 168   |          |
| Western Region  | 200     | 210      | 240   | 288   | <b>A</b> |
| Southern Region | 300     | 180      | 295   | 354   | <b>T</b> |
| Northern Region | 220     | 195      | 185   | 222   |          |

Figure 8 - Copy Destination

4. Click on **Paste** button (see Figure 9).

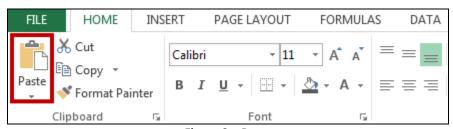


Figure 9 – Paste

5. Your data will be copied into the destination cells (see Figure 10).

| Name            | January | February | March | April | May |
|-----------------|---------|----------|-------|-------|-----|
| Eastern Region  | 110     | 175      | 140   | 168   | 168 |
| Western Region  | 200     | 210      | 240   | 288   | 288 |
| Southern Region | 300     | 180      | 295   | 354   | 354 |
| Northern Region | 220     | 195      | 185   | 222   | 222 |

Figure 10 - Copied Data

#### **Sorting**

Excel gives you the ability to sort a list of items, names, or numbers. You can select which field or fields you want to use for the sort, and whether to sort in ascending or descending order. The following explains how to sort the First Names in a table.

- 1. Click in cell A3 to make it the active cell.
- 2. On the *Home* tab, click on the **Sort & Filter** icon (see Figure 11).

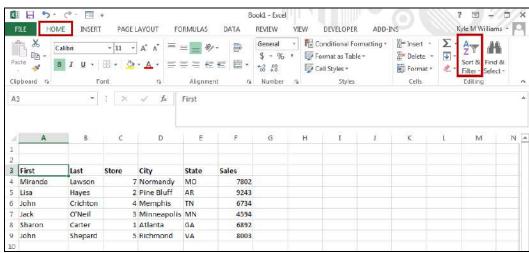


Figure 11 - Sort & Filter

3. Select *Sort* **A to Z.** This will sort the list in ascending order by *First Name*, since the active cell was in the *First Name* column (see Figure 12).



Figure 12 - Sort A to Z

4. Your list will now be sorted in alphabetical order by First Name (see Figure 13).

| First   | Last     | Store | City        | State | Sales |
|---------|----------|-------|-------------|-------|-------|
| Jack    | O'Neil   | 3     | Minneapolis | MN    | 4594  |
| John    | Crichton | 4     | Memphis     | TN    | 6734  |
| John    | Shepard  | 5     | Richmond    | VA    | 8003  |
| Lisa    | Hayes    | 2     | Pine Bluff  | AR    | 9243  |
| Miranda | Lawson   | 7     | Normandy    | MO    | 7802  |
| Sharon  | Carter   | 1     | Atlanta     | GA    | 6892  |

Figure 13 - Sorting

#### Sorting With the Data Sort Menu Option

Another way to sort in Excel is with the Data Sort menu option. The following explains how to sort by *First Name* using this option:

1. Click on the heading labeled **First** to select the first name column (see Figure 14).



Figure 14 - Selecting the First Name Column

2. From the Data tab, Click Sort (see Figure 15).

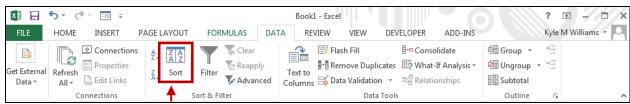


Figure 15 - Data Sort

3. In the *Sort* dialog box select the column heading that you want to sort by from the *Sort by* field (see Figure 16).

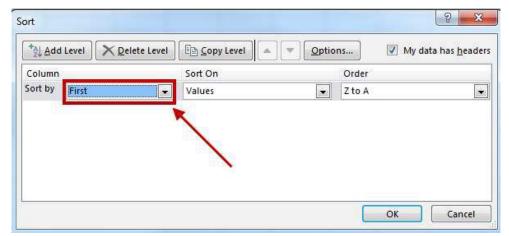


Figure 16 - Sort by field

4. In the *Order* dropdown, select **A-Z** to sort your data by alphabetical order, select the *A to Z* option (see Figure 17).

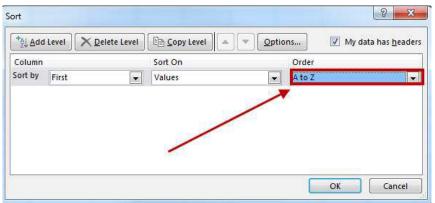


Figure 17 - Order

5. Click OK. Your Data will be sorted by Alphabetical Order

# Formatting Cells as a Table

With Excel, you have the ability to take your data and format it as a table. With these tables, you may readily organize, sort, and filter your data while also easily making your cells visually appealing. The following explains how to format your data as a table.

1. Select the **desired cell range** that you wish to format as a table (see Figure 18).

|    | Α        | В     | С     | D     | E     | F     | G     | Н | I        |
|----|----------|-------|-------|-------|-------|-------|-------|---|----------|
| 1  |          |       |       |       |       |       |       |   |          |
| 2  |          | Jan   | Feb   | Mar   | Apr   | May   | Jun   |   | Average  |
| 3  | Wilson   | 3042  | 4245  | 4235  | 5678  | 6890  | 7053  |   | 5190.5   |
| 4  | Murray   | 5676  | 3574  | 4263  | 6045  | 5267  | 4352  |   | 4862.833 |
| 5  | Smith    | 5325  | 4567  | 6542  | 5674  | 4246  | 4563  |   | 5152.833 |
| 6  | Richards | 4367  | 3467  | 4324  | 4256  | 5667  | 6423  |   | 4750.667 |
| 7  | Andrew   | 2685  | 5425  | 4903  | 3464  | 3424  | 6346  |   | 4374.5   |
| 8  | Marshal  | 3636  | 3267  | 1256  | 2357  | 4326  | 5423  |   | 3377.5   |
| 9  | Total    | 24731 | 24545 | 25523 | 27474 | 29820 | 34160 |   | 27708.83 |
| 10 |          |       |       |       |       |       |       |   |          |
| 11 |          |       |       |       |       |       |       |   |          |

Figure 18 - Select your range

2. Click on the **Format as Table** button located on the *Home* tab on the ribbon (see Figure 19).



Figure 19 - Format as Table

3. In the dropdown that appears, select your desired **Table style** (see Figure 20).



Figure 20 - Table Style

4. In the Format as Table window, click **OK** (see Figure 21).



Figure 21 - Click Ok

5. Your data will be formatted as a table according to your specifications (see Figure 22).

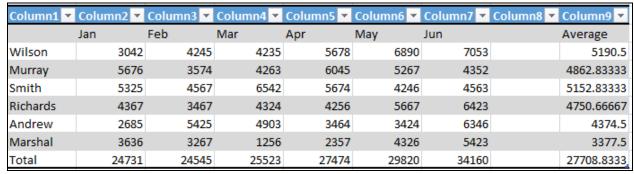


Figure 22 - Formatted Tables

# **Conditional Formatting**

Conditional formatting is a very useful tool that will allow you to automatically format your data in order to provide a useful way to visualize information and make your worksheet easier to understand. With conditional formatting, you will be able to apply formatting such as different colors to one or more cells based on cell value. The following explains how to use Conditional Formatting to your excel spreadsheet.

1. Select the **desired cell ranges** that you wish to apply the conditional formatting rule (see Figure 23).

|          | Jan   | Feb   | Mar   | Apr   | May   | Jun   | Average  |
|----------|-------|-------|-------|-------|-------|-------|----------|
| Wilson   | 3042  | 4245  | 4235  | 5678  | 6890  | 7053  | 5190.5   |
| Murray   | 5676  | 3574  | 4263  | 6045  | 5267  | 4352  | 4862.833 |
| Smith    | 5325  | 4567  | 6542  | 5674  | 4246  | 4563  | 5152.833 |
| Richards | 4367  | 3467  | 4324  | 4256  | 5667  | 6423  | 4750.667 |
| Andrew   | 2685  | 5425  | 4903  | 3464  | 3424  | 6346  | 4374.5   |
| Marshal  | 3636  | 3267  | 1256  | 2357  | 4326  | 5423  | 3377.5   |
| Total    | 24731 | 24545 | 25523 | 27474 | 29820 | 34160 | 27708.83 |

Figure 23 - Select your Desired Range

2. From the Home tab, click on **Conditional Formatting** (see Figure 24)

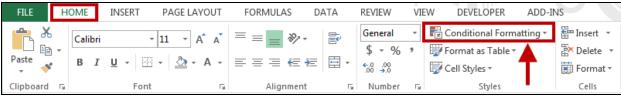


Figure 24 - Conditional Formatting

3. In the Drop-down menu, hover your mouse over your **Highlight Cell Rules** to select the desired conditional formatting type (see Figure 25).

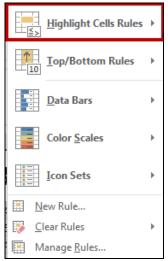


Figure 25 - Highlight Cell Rules

4. In this example, we want to highlight those values greater than \$5000. To do so, hover your mouse over the **Greater Than** option (see Figure 26).

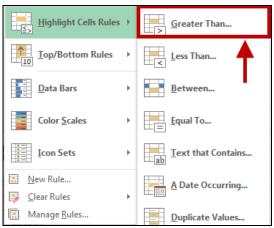


Figure 26 - Greater Than

5. In the *Dialog box* that appears, enter the desired value into the field. In this example, enter **5000** (see Figure 27).



Figure 27 - Enter your desired value

6. In the **formatting style dropdown**, select your preferred *highlight colors* (see Figure 28).

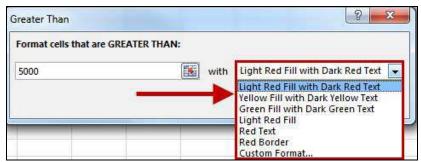
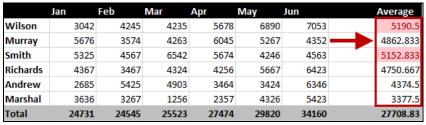


Figure 28 - Select your preferred highlight colors

7. The conditional formatting style will be applied to the selected cells (see Figure 29).



**Figure 29 - Conditional Formatting Applied** 

#### **Removing Conditional Formatting:**

1. Click on the **Conditional Formatting** command, located in your *Home* tab on the Ribbon (see Figure 30).



Figure 30 - Conditional Formatting

2. Hover your mouse over the Clear Rules (see Figure 31).

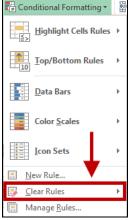


Figure 31 - Clear Rules

3. To clear rules from the entire sheet, click on **Clear Rules from Entire Sheet.** Your Conditional Formatting rules will be cleared (see Figure 32).

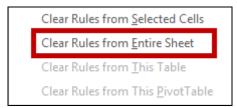


Figure 32 - Clear Rules from the Entire Sheet

#### Additional Assistance

If you need additional assistance with Microsoft Office Access 2013, contact University Information Technology Services (UITS) at:

#### **Faculty and Staff Service Desk**

Phone: 470-578-6999

Email: <a href="mailto:service@kennesaw.edu">service@kennesaw.edu</a>

#### **Students Help Desk**

Phone: 470-578-3555

Email: studenthelpdesk@kennesaw.edu