**Advance Excel Assignment 8**

1. **What do you mean by AutoComplete feature in Excel and what are the benefits of using this feature?**

Here are the benefits of using the AutoComplete feature in Excel:

1. Time-saving: AutoComplete helps save time by automatically suggesting entries, eliminating the need to manually type repetitive or similar data. It reduces keystrokes and speeds up data entry tasks.
2. Accuracy and Consistency: By suggesting existing values or patterns, AutoComplete promotes accuracy and consistency in data entry. It helps ensure that data is entered correctly and consistently across cells, reducing the chances of typographical errors or inconsistencies.
3. Easy Data Entry: AutoComplete simplifies data entry, especially when dealing with long or complex entries. It minimizes the effort required to enter data by offering suggestions based on previous inputs, making it convenient and efficient to fill in similar values.
4. Minimize Mistakes: The AutoComplete feature can help prevent mistakes or inconsistencies in data entry. It reduces the likelihood of misspelled words, incorrect values, or incomplete entries by presenting options for selection.
5. Learn and Adapt: Excel's AutoComplete feature learns from your input and adapts to your data patterns over time. It remembers frequently used values, making subsequent data entry even faster and more accurate.
6. Customization: Excel allows you to customize the AutoComplete feature. You can choose whether to enable or disable it, specify the number of suggestions to display, and control its behaviour according to your preferences.
7. **Explain working with workbooks and working with cells.**

A workbook in Excel is a file that contains one or more worksheets where you can enter and organize your data. Here's how you work with workbooks:

* 1. Creating a New Workbook: To create a new workbook, you can either open Excel and start with a blank workbook or use a template provided by Excel.
  2. Saving a Workbook: To save a workbook, click on the "File" tab in the ribbon, then select "Save As" or "Save" option. Specify the file name, location, and choose the desired file format. You can also use the shortcut Ctrl + S to quickly save the workbook.
  3. Opening an Existing Workbook: To open an existing workbook, click on the "File" tab, then select "Open" and browse to the location where the workbook is saved. Alternatively, you can use the Ctrl + O shortcut to open the Open dialog box.
  4. Adding Worksheets: By default, a new workbook in Excel contains one worksheet. To add additional worksheets, click on the "+" icon next to the sheet tabs at the bottom of the Excel window. You can also right-click on a sheet tab and select "Insert" to add a new worksheet.
  5. Renaming and Deleting Worksheets: To rename a worksheet, right-click on the sheet tab and choose "Rename." To delete a worksheet, right-click on the sheet tab and select "Delete." Be cautious as deleting a worksheet permanently removes its data.

1. **What is fill handle in Excel and why do we use it?**

The fill handle in Excel is a small square located in the bottom-right corner of a selected cell or range. It is used to quickly fill a series or pattern into adjacent cells. Here's how it works and why we use it:

* 1. Auto Filling a Series: Excel's fill handle is commonly used to automatically fill a series of numbers, dates, or other patterns. For example, if you enter the number "1" in a cell and drag the fill handle down, Excel will automatically fill the adjacent cells with a series of incrementing numbers (e.g., 2, 3, 4, and so on). Similarly, you can use the fill handle to create series of dates, weekdays, months, or even custom patterns.
  2. Saving Time and Effort: The fill handle saves time and effort when working with large sets of data or when repeating a pattern in multiple cells. Instead of manually typing or copying the data into each cell, you can simply use the fill handle to extend the series or pattern.
  3. Extending Formulas: The fill handle is also useful for extending formulas in Excel. If you have a formula in one cell that references certain cells, you can use the fill handle to copy and paste the formula into adjacent cells while automatically adjusting the cell references. This allows you to quickly apply the same calculation to multiple cells.
  4. Custom Lists: You can create custom lists in Excel and use the fill handle to quickly populate the list in adjacent cells. For example, if you have a list of names or categories that you frequently use, you can create a custom list and then use the fill handle to populate the list wherever needed.
  5. Options for Fill: When using the fill handle, Excel offers various options for filling the data. You can choose to fill the cells down, up, to the right, or to the left, depending on your requirements.

1. **Give some examples of using the fill handle.**

Here are some examples of using the fill handle in Excel:

* 1. Creating a Number Series: Enter the number "1" in a cell and then click and drag the fill handle downwards. Excel will automatically fill the adjacent cells with an incrementing number series (2, 3, 4, and so on).
  2. Expanding a Date Series: Enter a date in a cell (e.g., 01/01/2023) and then click and drag the fill handle downwards or sideways. Excel will automatically fill the adjacent cells with a series of incrementing dates, following the desired pattern (daily, weekly, monthly, etc.).
  3. Auto Filling Weekdays: Enter a weekday (e.g., Monday) in a cell and then click and drag the fill handle downwards. Excel will automatically fill the adjacent cells with weekdays, following the sequential order (Tuesday, Wednesday, Thursday, and so on).
  4. Customizing a Pattern: Enter a pattern or series of values in a few cells, such as a custom list of names or categories. Select the cells containing the pattern and then click and drag the fill handle to extend the pattern to adjacent cells.
  5. Copying Formulas: If you have a formula in one cell that references certain cells, you can use the fill handle to copy and paste the formula into adjacent cells while automatically adjusting the cell references. Excel will update the references accordingly, ensuring the formula works correctly in each cell.
  6. Filling Formatting: If you have a cell with specific formatting, such as background colour or borders, you can use the fill handle to copy the formatting to adjacent cells. Select the cell with the desired formatting and then click and drag the fill handle to apply the formatting to other cells.

1. **Describe flash fill and what the different ways to access the flash fill are.**

Here's an overview of Flash Fill and the different ways to access it:

* 1. How Flash Fill Works:
     1. Flash Fill analyses the data you have entered in a column or range and tries to identify a pattern based on the examples you provide.
     2. Once it recognizes a pattern, it suggests the remaining values based on that pattern, saving you time and effort in data entry and formatting tasks.
     3. Flash Fill works with various types of data, including names, dates, phone numbers, addresses, and more.
  2. Accessing Flash Fill:
     1. Automatic Suggestion: When you start typing in a column adjacent to existing data that follows a pattern, Excel may automatically suggest Flash Fill. A light bulb icon appears next to the active cell, indicating that Flash Fill is available. Pressing Enter or Ctrl + E will accept the suggestion and apply Flash Fill.
     2. Ribbon Option: In the Data tab of the Excel ribbon, under the Data Tools section, you'll find the Flash Fill button. Clicking on this button will immediately apply Flash Fill to the selected column or range.
     3. Keyboard Shortcut: You can use the keyboard shortcut Ctrl + E to toggle Flash Fill on and off. Pressing Ctrl + E will automatically fill the values based on recognized patterns in the adjacent column or range.
  3. Using Flash Fill:
     1. Start typing a value in the first cell adjacent to the data you want to extract or transform.
     2. Excel will recognize the pattern based on the examples you provide. If the pattern is detected correctly, the remaining values will be automatically filled in the adjacent cells.
     3. If the suggested values are correct, press Enter or use the Ctrl + E shortcut to accept the Flash Fill suggestion.
     4. If the suggested values are incorrect or not what you intended, you can simply undo the Flash Fill by pressing Ctrl + Z or use the Clear command to remove the filled values.

1. **Extract first name and last name from the mail id and then from the address column, extract the city, state, and pin code using the flash fill. Given below is an example of the columns you have to create. Paste the screenshot of what you have created using the flash fill command.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Name | Email | Ext\_F | Ext\_L | Address | City | Z\_Code | State |
| Stephen | stephen@javatpoint.com | stephen | javatpoint.com | Texas,75001, USA | Texas | 75001 | USA |
| Peter | Peter@javatpoint.com | Peter | javatpoint.com | California,90001, USA | California | 90001 | USA |
| Donald | donald@javatpoint.com | donald | javatpoint.com | New York,10001, USA | New York | 10001 | USA |
| Joseph | Joseph@javatpoint.com | Joseph | javatpoint.com | Florida,32003, USA | Florida | 32003 | USA |
| John | john@javatpoint.com | john | javatpoint.com | washington,98001,USA | Washington | 98001 | USA |

* 1. For first name extract: =LEFT (C2, FIND ("@”, C2)-1).
  2. For Last name extract: =MID (C2, FIND ("@”, C2) +1, LEN(C2)-FIND ("@”, C2)).
  3. For City, Z code & State: I just typed only city name, zip code and state using flash fill option.

