Assignment - 5

1) what is Flash fill and how does it work in Excel?

Flash fill is an intelligent Excel feature that automatically fills values in a column by detecting patterns in the data you enter. It learns from your example and applies the same logic to the remaining rows without using formulas.

How flash fill works

→ You enter the desired output manually for the first row

→ Excel analyzes the Pattern

→ when you press Ctrl + E or select Data → Flash Fill, Excel fills the remaining cells automatically.

Examples of Flash fill : Extract First Name

Full Name	First Name
Devendragowd	Devendra
Ravi Kumar	Ravi

Types of Tasks Flash Fill can Perform

→ splitting text (First name (last name)
→ Combining text
→ Reformatting dates
→ Removing unwanted characters.
→ Extracting initials
→ changing letter case
→ Formatting IDS, codes, or numbers.

2) How would you use Flash Fill to reformat data in a column?

Flash Fill is used to change the format of existing data by recognizing a pattern from your manual entry and applying it to the entire column without formulas.

Steps to use flash Fill for Reformatting

→ Make sure your original data is in one column
→ Insert a new column next to it
→ Type the desired format for the First value
→ Press Enter
→ Press ctrl + E
→ Excel reformats all remaining rows automatically

Examples of Reformatting using Flash fill

Example 1 :- Reformat Names

Original Data:

GADDAM DEVENDRA GOWD

Desired format: DEVENDRA GOWD

⇒ Type the o/p once ⇒ Press Ctrl + E

Example 2 :- change Date formate

Original :- 2026-01-22

Reformatted :- 22-01-2026

Common Reformatting Tasks

⇒ changing text case (upper/lower/proper)

⇒ Rearranging names

⇒ Formatting ID names

⇒ Removing symbols or spaces

⇒ Adding Prefixes or suffixes.

3) Can you explain the process of splitting data into columns using Text to columns?

Text to columns is an Excel features used to split data from a single column into multiple columns based on a delimiter or fixed width. It is commonly

used for data cleaning and formatting.

why use Text to columns?

⇒ when data is combined in one column

⇒ To separates names, dates, codes or address

⇒ To prepare data for analysis.

Types of Text to columns

⇒ Delimited:

⇒ Data is separated by characters like comma, space, tab, hyphen.

Example:

Devendra, Gowd ⇒ Devendra | Gowd

⇒ Fixed width

⇒ Data is split based on specific positions

Example:

DEVENDRAGOWD ⇒ DEVENDRA | GOWD

step by step Process

⇒ select the column containing the data

⇒ Goto Data ⇒ Text to columns

⇒ choose Delimited or Fixed width

⇒ click Next

⇒ select the delimeter or set column breaks

⇒ choose data format (General, Text, Date)

⇒ click Finish

uses of Text to columns

=> splitting full names

=> separating csv data

=> converting text dates to real dates.

=> cleaning imported data.

4) what are common delimiters used in the Text to columns feature?

In Excel, delimeters are characters text within a cell. when using the text to columns features with the Delimited option, Excel splits the data based on the selected delimeter.

commonly used Delimeters

1. comma (,)

    8. => most commonly used delimiter

        => used in csv (common separated values) files.

Example :

    Devendra, Goud => Devendra | Goud

2. space

    => used when data is separated by space.

Example :

    Devendra Goud => Devendra | Goud

3. **Tab**

often used when copying data from web pages or text files.

4. **Semicolon (;)**

common in European data formates

Example:

$$A; B; C \rightarrow A | B | C$$

5. **Hyphen (-)**

used in dates, codes, or IDs

Example:

$$22-01-2026 \rightarrow 22 | 01 | 2026$$

6. **Slash (/)**

common in dates or file paths

Example:

$$22/01/2026 \rightarrow 22 | 01 | 2026$$

7. **Custom Delimeter**

Any special character. like:

- |
- #
- @

5)

5) How do you use the LEN function to count the number of characters in a cell?

the LEN function in Excel is used to count the total number of characters in a text string along with spaces. It helps in analyzing and validating text data.

Syntax :

=LEN (text)

• Text → the cell or text string whose length you want to count.

Example :

=LEN ("Excel")

Result : 5

Practical uses of LEN

→ checking minimum or maximum character limits.
→ Password length validation.
→ Data cleaning and quality checks.
→ Identifying extra spaces
→ working with text functions like LEFT, RIGHT, MID.

b) What is the purpose of the SUBSTITUTE function and how is it used?

The SUBSTITUTE function in Excel is used to replace specific text within a text string with new text. It is mainly used for text cleaning, correction and standardization.

PURPOSE of SUBSTITUTE

→ Replace unwanted words or characters
→ clean imported or messy data
→ correct spelling or formatting
→ standardize text values.

Syntax:

= SUBSTITUTE (text, old_Text, newText, [instance_num])

Examples:

Replaces All occurrences

= SUBSTITUTE ("Excel Excel", "Excel", "MS Excel")

Practical Uses

→ Removing hyphens, commas, or symbols
→ cleaning phone numbers
→ fl Fixing repeated text
→ Preparing data for reports.

7) How would you combine the CONCATENATE function with Flash Fill?

The CONCATENATE (or CONCAT) function and Flash Fill are both used to combine text values. They can be used together to understand Patterns and automate text joining in Excel.

Explanation:

→ CONCATENATE /CONCAT combines text from multiple cells using a formula.

→ Flash Fill can then recognize the combined Pattern and apply it to other rows without formulas.

method 1: using CONCATENATE function

Syntax:

= CONCATENATE (text 1, text 2, ----)

(or)

= CONCATEA1 = CONCAT(text 1, text 2,----)

Example:

A1 = Devendra

B1 = Gowd

⇒ =CONCAT (A1, " " B1)

Devendra Gowd

method 2 :- Using Flash Fill for the same Task

→ Type the combined value manually:

Devendra gowd

→ Press ctrl + E
→ Excel Fill all rows automatically

8) Explain the difference between the REPT Function and the SUBSTITUTE Function.

The REPT and SUBSTITUTE Functions are both text functions in Excel, but they serve completely different Purposes.

→ REPT Function :

Purpose

• Repeats a text string a specified number of times

• mainly used for formatting and visual re presentation.

syntax:

= REPT (text, number_times)

Example :

= REPT (" * ", 5)

RESULT : * * * * *

SUBSTITUTE Function:

Purpose

→ Replace specific text within a string with new text.

→ used for text cleaning and correction.

Syntax:

= SUBSTITUTE (Text, old_text, new_text, [instance_num])

Example:

=SUBSTITUTE ("A-B-C", "-", " ")

RESULT: ABC

a) How can you use Text to columns to convert text to dates?

some times dates are stored as Text, which prevents Excel from Performing date calculations. The text to columns features can be used to convert text - formatted dates into real Excel data values

why this is Needed

→ Imported data (CSV, TXT) often stores dates as Text

→ Text dates cannot be used in calculations

→ Text to columns forces Excel to recognize dates correctly

step-by-step Process

→ Select the column containing text-formatted dates

→ Go to Data → Text to columns

→ choose Delimited

→ click Next → Next

→ In column data format, select Date

→ choose the correct format:

      DMY (22-01-2026)

      MDY (01-22-2026)

      YMD (2026-01-22)

→ click Finish

Be Example :

Before (Text)

    22-01-2026

After (Data value)

    22-01-2026

How to check if conversion worked
- change cell format to general
- Date will appear as a number

10) What is the significance of the Flash Fill Preview in Excel?

The Flash Fill Preview shows how Excel will fill the data based on the pattern it has detected from your example before the data is actually filled. It helps users verify accuracy and avoid mistakes.

why the Flash Fill Preview is Important

=> confirms Pattern Recognition

⧆ shows whether Excel has understood your Pattern correctly

* Helps you check if the output is as expected.

=> Prevents Data Errors

* You can stop Flash Fill if the Preview is incorrect.

* Avoids wrong formatting in large datasets.

=> Saves Time

* Reduces the need to undo and correct mistakes.

* Ensures correct filling in one attempt.

⇒ Improves Data Accuracy

* Ensures clean and consistent data.
* Especially important for names, dates, DOB, and codes

Example

Original Data:-

Devendra Gowd

Typed output

Devendra