Assignment

Question 1: What is the difference between 'Paste' and 'Paste Special' in Excel?

Answer:

Paste is used to paste all copied content exactly as it is, including values, formulas, formatting, and comments.

Paste Special allows users to paste only specific elements such as values, formulas, formatting, or to perform operations like transpose or mathematical calculations.

Example:

- If you copy a cell containing a formula =A1+B1:
    - **Paste** → Pastes the formula
    - **Paste Special → Values** → Pastes only the calculated result
    - **Paste Special → Formats** → Pastes only the formatting

Conclusion: Paste is quick and general, while Paste Special gives more control over what is pasted.

Question 2: Describe the functions and usefulness of 'Freeze Panes' and 'Split Panes' in Excel.

Answer:

Freeze Panes

- Keeps selected rows or columns visible while scrolling.
- Commonly used to freeze header rows or first columns.

Example: Freezing the top row keeps column headers visible while scrolling down large datasets.

Split Panes

- Divides the worksheet into separate scrollable sections.
- Useful for comparing different parts of the same worksheet.

Difference:

- Freeze Panes locks rows/columns.
- Split Panes creates multiple viewing areas.

Question 3: Difference between inserting a new row and inserting a new column. Can you insert multiple rows or columns at once?

Answer:

- **Insert Row:** Adds a horizontal row above the selected row.
- **Insert Column:** Adds a vertical column to the left of the selected column.

Inserting multiple rows or columns:

- Yes, you can select multiple rows or columns first, then right-click and choose **Insert**.

Example: Selecting 3 rows and inserting will add 3 new rows at once.

Question 4: What are logical functions in Excel? Give examples.

Answer:

Logical functions are used to perform decision-making operations based on conditions.

Examples:

1. **IF Function**

=IF(A1>=50,"Pass","Fail")

Used to return different results based on a condition.

2. **AND Function**

=AND(A1>=50, B1>=50)

Returns TRUE if all conditions are met.

Applications: Grading systems, eligibility checks, decision analysis.

Question 5: Purpose of XLOOKUP and how it differs from VLOOKUP

Answer:

XLOOKUP is a modern lookup function used to find values in a range and return matching results.

Differences:

Feature	XLOOKUP	VLOOKUP
Lookup direction	Any direction	Left to right only
Column index	Not required	Required
Error handling	Built-in	Needs IFERROR
Flexibility	High	Limited

Conclusion: XLOOKUP is more powerful, flexible, and easier to use.

Question 6: Create 'Employee Data' worksheet

Answer:

	Name	Age	Department
72	Rahul	28	HR
73	Anita	32	Finance
74	Rohit	25	IT
75	Priya	30	Marketing
76	Aman	27	Operations

Question 7: Insert and delete multiple rows and columns

Answer:

Creat a dataset:

Name	Age	Department
Rahul	28	HR
Anita	32	Finance
Rohit	25	IT
Priya	30	Marketing
Aman	27	Operations

Add employee ID

Name	Age	Department	Employee ID
Rahul	28	HR	1001
Anita	32	Finance	1002
Rohit	25	IT	1003
Priya	30	Marketing	1004
Aman	27	Operations	1005

Delete some rows

Name	Age	Department	Employee ID
Rahul	28	HR	1001
Rohit	25	IT	1003
Aman	27	Operations	1005

Question 8: Find and Replace department names

Answer:

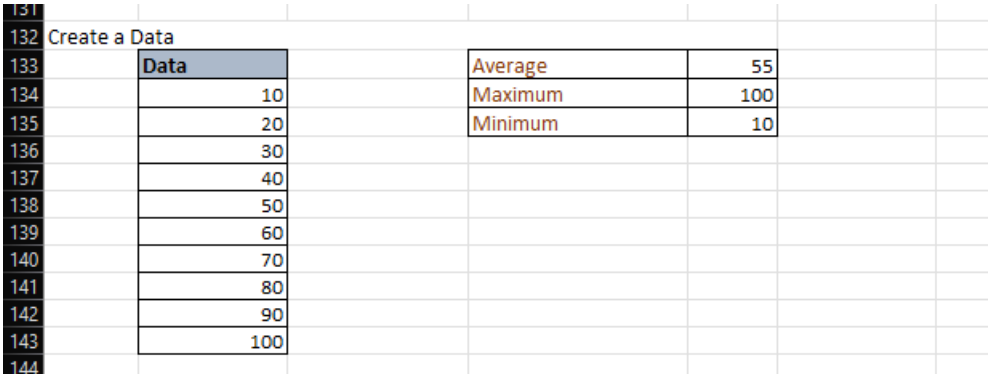
Name	Age	Department	Employee ID
Rahul	28	HR	1001
Anita	32	Finance	1002
Rohit	25	IT	1003
Priya	30	Marketing	1004
Aman	27	Operations	1005
Suman	24	Analyst	1006

I Replace Analyst with IT

Name	Age	Department	Employee ID
Rahul	28	HR	1001
Anita	32	Finance	1002
Rohit	25	IT	1003
Priya	30	Marketing	1004
Aman	27	Operations	1005
Suman	24	IT	1006

Question 9: Apply AVERAGE, MAX, MIN functions

Answer:



Create a Data

Data
10
20
30
40
50
60
70
80
90
100

Average	55
Maximum	100
Minimum	10

Question 10: Detect and handle missing values in Excel

Answer:

As a Data Scientist, missing data must be identified and handled properly.

Detection Tools:

- **Go To Special → Blanks**: Highlights empty cells
- **ISBLANK(cell)**: Returns TRUE if a cell is empty
- **COUNTBLANK(range)**: Counts empty cells

Handling Methods:

- Replace with mean/median
- Fill with default values
- Remove rows if necessary.

Data:

Employee Name	Age	Department	Salary
Rahul	28	IT	45000
Anita		Finance	52000
Rohit	25	HR	
Priya	30	Marketing	60000
Aman		HR	48000

Detect Blank cells
TRUE
FALSE

Count Blank Cells
3

1. Detecting blank cells usinig conditional formating

Employee Name	Age	Department	Salary
Rahul	28	IT	45000
Anita		Finance	52000
Rohit	25	HR	
Priya	30	Marketing	60000
Aman		HR	48000

2. fill with mean

Employee Name	Age	Department	Salary
Rahul	28	IT	45000
Anita	27.66666667	Finance	52000
Rohit	25	HR	51250
Priya	30	Marketing	60000
Aman	27.66666667	HR	48000

Mean of Age	27.6666667
Mean of Salary	51250