1. What is Data Analysis?

Data analysis is the process of inspecting, cleaning, transforming, and modeling data to discover useful information, support decision-making, and draw conclusions. It involves using statistical, computational, and visual techniques to understand patterns, trends, and relationships within data.

2. Steps Involved in Data Analysis:

Data Collection: Gathering data from various sources.

Data Cleaning: Identifying and correcting errors, dealing with missing values, and ensuring consistency.

Data Exploration: Summarizing and visualizing data to understand patterns and insights.

Data Modeling: Applying statistical or machine learning models to make predictions or understand relationships.

Interpretation and Reporting: Drawing conclusions, presenting findings, and making data-driven decisions.

3. 5 Tools Used for Data Analysis:

- Microsoft Excel

- Python (libraries like Pandas, NumPy, Matplotlib)

- R (especially for statistical analysis)

- SQL (for querying databases)

- Tableau or Power BI (for data visualization)

4. Tab with Data Validation Option:

In Microsoft Excel, the 'Data Validation' option can be found in the Data tab.

5. Contents of the Styles Group in the Home Tab:

In Microsoft Excel, the 'Styles' group in the Home tab includes:

Conditional Formatting: Allows formatting based on cell values.

Format as Table: Applies a predefined table style to a data range.

Cell Styles: A set of predefined styles for consistent formatting across cells.