

## **Introduction to Data Analysis**

Data analysis is the process of inspecting, cleaning, and modeling data with the goal of discovering useful information and supporting decision-making.

It involves applying statistical and logical techniques to evaluate data.

The process helps organizations understand patterns and trends in their datasets.

Data analysis is widely used in business, science, and technology.

## **Types of Data Analysis**

1. Descriptive Analysis: Summarizes raw data into a readable form.
2. Diagnostic Analysis: Explains why something happened by examining data.
3. Predictive Analysis: Uses data to make predictions about future outcomes.
4. Prescriptive Analysis: Suggests actions to take based on predictions.

Together, these approaches make data analysis a powerful decision-making tool.