Univariate data refers to a dataset where each observation is associated with only one variable.

This means it focuses on measuring or observing a single characteristic or attribute for each individual in the dataset.

Characteristics of univariate data:

1. No relationships: It focuses on describing and summarizing the distribution of a single variable. It does not explore relationships with other variables or attempt to identify causal connections.
2. Descriptive statistics: It is a measure of central tendency(mean, median) and measure of dispersion(range, variance)

Differences between univariate data, bivariate data and multivariate:

Univariate data

It summarizes a single variable

It does not deal with causes or relationships

Bivariate data

It summarizes two variables

It deals with relationships between two variables

Multivariate data

It summarizes more than two variables

Analyzes complex relationships between multiple variables

Types of univariate data

1. Numerical(Quantitative) Data: This data that consists of numerical values and have statistical properties e.g. discrete data, continuous data
2. Categorical (Qualitative) Data: This data describes qualities or characteristics and is non-numerical e.g. nominal data, ordinal data.