

## Qualitative Data:

Qualitative data describes qualities or characteristics and cannot be measured numerically. It provides insights into attitudes, opinions, behaviors, and other non-numeric aspects of the data.

Examples of qualitative data include:

**Descriptive data:** Observations, descriptions, or narratives.

**Categorical data:** Labels or categories that represent characteristics or attributes, such as gender, ethnicity, or job title.

**Ordinal data:** Categories with a natural order or ranking, but the differences between categories may not be uniform. For example, survey responses with options like "strongly agree," "agree," "neutral," "disagree," and "strongly disagree."

## Quantitative Data:

Quantitative data consists of numerical measurements or counts and can be subjected to mathematical operations. It provides insights into quantities, amounts, or sizes.

Examples of quantitative data include:

**Continuous data:** Data that can take any value within a range, such as temperature, weight, or height.

**Discrete data:** Data that can only take specific, separate values, such as counts of objects, number of people, or number of items sold.

**Interval data:** Numeric data where the difference between two values is meaningful and consistent, but there is no true zero point. An example is temperature measured in Celsius or Fahrenheit.

**Ratio data:** Similar to interval data, but with a true zero point, meaning zero indicates the absence of the quantity being measured. Examples include height, weight, and income.