

* Types of Data in Statistics :

■ Introduction of data :

There are different types of data in Statistics, that are collected, analysed, interpreted and presented. The data are the individual pieces of factual information recorded, and it is used for the purpose of the analysis process.

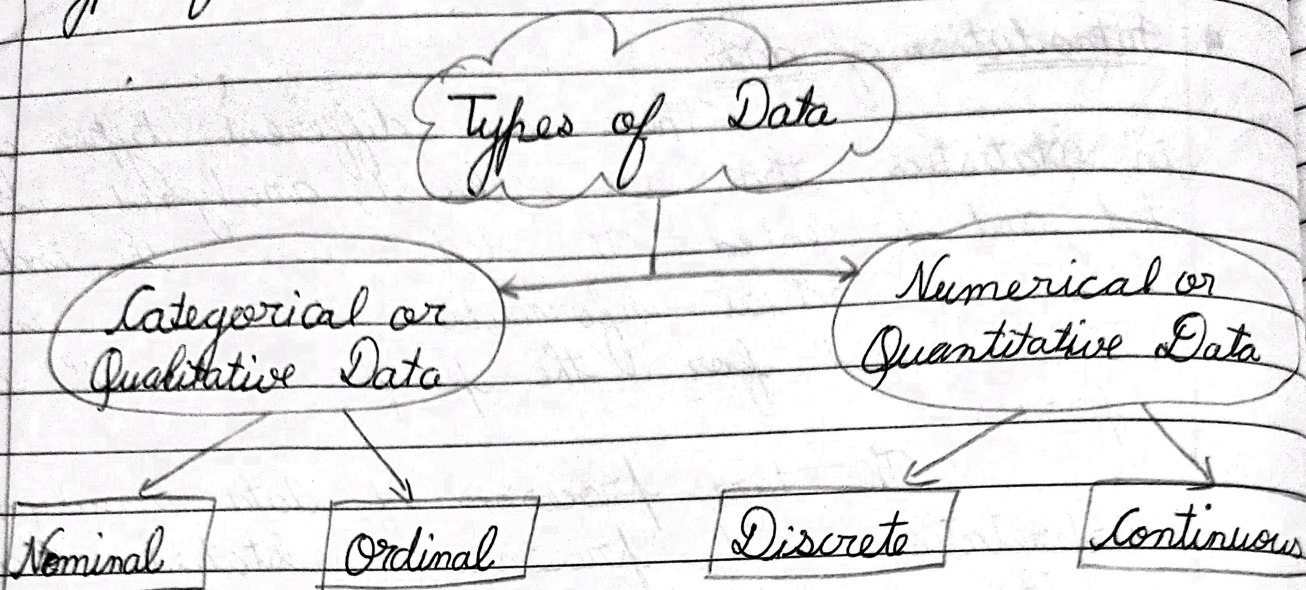
The two processes of data analysis are interpretation and presentation. Statistics are the result of data analysis.

■ Difference between Data and Statistics :

While the terms 'data' and 'statistics' are often used interchangeably, in scholarly research there is an important distinction between them.

<u>Data</u>	<u>Statistics</u>
→ Data are individual pieces of factual information recorded and used for the purpose of analysis. It is the raw information from which statistics are created.	Statistics are the results of data analysis - its interpretation and presentation.
→ In other words, some computation has take place that provides some understanding of what the data means.	Statistics are often, through they don't have to be, presented in the form of a table, chart or graph.

Types of Data in Statistics



• Qualitative Data :

Qualitative data, also known as the categorical data, describes the data that fits into the categories. Qualitative data are not numerical.

The categorical information involves categorical variables that describe the features such as a person's gender, home town, etc. Categorical measures are defined in terms of natural language specifications, but not in terms of numbers.

Sometimes categorical data can hold numerical values, but those values don't have a mathematical sense. Examples of the categorical data are birthdate, favourite sport, school postcode.

Here, the birthdate and school postcode hold the quantitative value, but it does not give numerical meaning.

→ Nominal data : Nominal data is one of the types of qualitative information which helps to label the variables without providing the numerical data value. Nominal data is also called the nominal scale.

→ Ordinal data : Ordinal variable/data is a type of data that follows a natural order. The significant feature of the nominal data is that the difference between the data values is not determined.

• Quantitative Data :

Quantitative data is also known as numerical data which represents the numerical value. Numerical data gives information about the quantities of a specific thing. Some examples of numerical data are height, length, size, weight and so on.

The quantitative data can be classified into two different types based on the data sets. The two different classifications of numerical data are discrete data and continuous data.

→ Discrete data : Discrete data can take only discrete values.

Discrete information contains only a finite number of possible values. These values can't be subdivided meaningfully. Here, things can be counted in whole numbers.

Examples : Number of students in the class.

→ Continuous data: Continuous data is data that can be calculated. It has an infinite number of probable values that can be selected within a given specific range.

Example: Temperature range.