Collection and Tabular Representation of Data

The process of gathering and analyzing accurate data from various sources to find answers to research problems, trends and probabilities, etc., to evaluate possible outcomes is Known as **Data Collection**.

We have to arrange data in tabular form by using frequency distribution table to make it an information.

Let us understand it with the help of an example:

Payal is fond of playing games with dice. She throws the dice and notes the observations each time. These are her observations: 4, 6, 1, 2, 2, 5, 6, 6, 5, 4, 2, 3. To know the exact number of times she got each digit (1, 2, 3, 4, 5, 6) as the outcome, she classifies them into categories. An easy way is to draw a frequency distribution table with tally marks.

Outcomes	Tally Marks	Frequency
1	I	1
2	III	3
3	I	1
4	II	2
5	II	2
6	III	3

The table above is an example of a frequency distribution table. You can observe that all the data that was collected has been organized under three columns. Thus, a **frequency distribution table** is a chart summarizing the values and their frequencies. In other words, it is a tool to organize data. This makes it easy for us to understand the given set of information.