

## **Basic distributions - Uniform**

## **Uniform Distribution**



Suppose we roll a die. The outcomes of this event can be 1,2,3,4,5,6



All of the outcomes have an **equal probability of occurrence** and are **mutually exclusive** 

We can say that the probabilities of occurrence is uniformly distributed.

This is referred to as **Uniform Distribution** 

Useful when we are interested in unbiased selection

## **Uniform Distribution**



There are two types of Uniform Distribution

**Discrete Uniform Distribution**: Can take a finite number (m) of values and each value has equal probability of selection.

**For example:** Number of books sold by a bookseller per day can be uniformly distributed between 100 to 300.

**Continuous Uniform Distribution**: Can take any value between a specified range.

**For example:** Tomorrow's temperature in United states can be uniformly Distributed between 12 degree Celsius to 17 degree celsius