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Probability: It measures likelihood of an event.

- Ex Dice = {1, 2, 3, 4, 5, 6}
- $P(x) = \frac{\text{No of favourable outcomes}}{\text{Total No of outcomes}}$

2 Rules in probability

1. Addition rule: OR
2. Multiplication Rule: AND

Addition Rule

1. Mutual Exclusive Event
 2. Non-Mutual Exclusive Event
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1. Mutual Exclusive Event

The different events won't occur at the same time.

Some examples of mutually exclusive events are

- Tossing a coin we either get a head or a tail. Head and tail cannot appear simultaneously. Therefore, the occurrence of a head or a tail is two mutually exclusive events.

2. Non-Mutual Exclusive Event

Here multiple events can occur at the same time.

Some examples of non-mutually exclusive events include:

- Getting a red card and getting a king.
- Getting an odd number and multiple of 3 in a dice throw.