Assalamu alaikum everyone. Welcome to this video. Myself B M Shahria Alam and in this video I’m going to talk about the topic which is PROPABILITY.

Probability is the way of expressing knowledge of belief that an event will occur on chance. If I brief a little bit then I can say that probability mean the percentage or the chance of an event that can occur among other events. Mainly probability is the branch of math that studies patterns of chance. The idea of probability is based on observation. Probability describes what happens over many, many trials.

There are different types of probability. But we will see here the basic types of probability.

***Classic probability***

**Classical probability** is a simple form of [probability](https://www.statisticshowto.com/probability-and-statistics/probability-main-index/) that has **equal odds of something happening**

**Exm: Rolling a fair die, Selecting bingo balls, Guessing on a test**

**Empirical probability:**

An empirical probability, also called an experimental probability, is closely related to the relative frequency of an event. Empirical probability uses the number of occurrences of a given outcome within a sample set as a basis for determining the probability of that outcome occurring again. The number of times "event X" happens out of 100 trials will be the probability of event X happening

A pair of sets which does not have any common element are called disjoint sets.

A pair of sets which does have any common element are called not disjoint sets.

**Axiomatic Probability:**

One important thing about probability is that it can only be applied to experiments where we know the total number of outcomes of the experiment, i.e. unless and until we know the total number of outcomes of an experiment, concept of probability cannot be applied

2. When S is the sample space of an experiment; that is the set of all possible outcomes, P(S) = 1.