SAMPLE SPACE: The Set S of all possible outcomes of an experiment (or observation) is called sample space provided only one result comes in each experiment.

**EVENT**: An event is subset of a simple space.

PROBEILITY: Probability of an event is ratio of number of element of event to number of element of sample space, a positive real number.

## **EXAMPLE:** Consider the experiment tossing two coins. Then possible outcomes (or falls HEAD or TAILS ) given by table

FIRST TOSS	COIN NO.1	COIN NO.2
	Н	Н
	Н	T
	T	T
	T	Н

Where H means head and T means tail

Now when you toss two coins together possible outcomes or sample space S=(H,H)(H,T)(T,T)(T,H). Consider the event E (coming head on face of both coins) = (H,H)

Probability of E AS P(E) =1/4