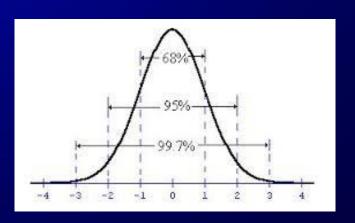


## Slide Title

- Normal Distribution
- Binomial Distribution
- Poisson Distribution

### Normal distribution

• is an arrangement of a data set in which most values cluster in the middle of the range and the rest taper off symmetrically toward either extreme.





## Binomial Dist.

- The binomial distribution is used when there are exactly two mutually exclusive outcomes of a trial. These outcomes are appropriately labelled "success" and "failure". The binomial distribution is used to obtain the probability of observing x successes in N trials, with the probability of success on a single trial denoted by p. The binomial distribution assumes that p is fixed for all trials.
- Exercise 1: Give an example for this kind of distribution?

### **Poisson Distribution**

- Poisson distribution: The Poisson distribution measures the likelihood of a number of events occurring within a given time interval.
- Exercise 2: Give an example for this kind of distribution?

# **Exponential distribution**

- It is the probability distribution that describes the time between events in a Poisson process, i.e. a process in which events occur continuously and independently at a constant average rate.
- Exercise 3 Give an example for this kind of distribution?