

$$P(X) = C(n, x)p^x q^{n-x}$$

Where

$$C(n, x) = \frac{n!}{(n-x)! x!}$$



$X=0,1,2,3,\dots$  Being the number of success



$P$  is the probability of success



$q$  is the probability of failure



$n$ =Number of Trial