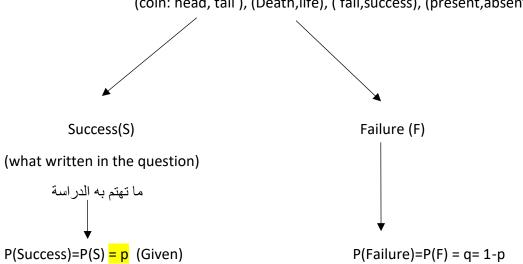Binomail Distribution

↓

Experiment

Two outcomes

(coin: head, tail), (Death,life), (fail,success), (present,absent)

Success(S)   Failure (F)

(what written in the question)

ما تهتم به الدراسة

P(Success)=P(S) = p (Given)   P(Failure)=P(F) = q= 1-p

* n : Sample size or number of repeating the experiment

(n given in the question)

X : Number of successes ,   ما تهتم به الدراسة

X =0,1,2,3,4,………………n

- The parameter of Binomail distribution is n , p
-     X   ~ Bin(n,p)
- The mean is $\mu = n \times p$
- The variance is σ^2 = nxpxq
- The standard deviation is $\sigma = \sqrt{nxpxq}$