

n = Number of trials = 5

K = Number of success = 5

P = Probability of a single trial being successful = 40%
 $\hookrightarrow 0.40$

$$P_x = \binom{n}{x} p^x q^{n-x}$$

$$P = {}^n C_K \times p^K \times (1-p)^{(n-K)}$$

$$\begin{aligned} P &= {}^5 C_5 \times 0.4^5 \times (1-0.4)^{5-5} \\ &\quad \downarrow \\ &\quad \frac{5!}{5! (5-5)!} \times 0.01024 \times \cancel{0.6} \\ &\quad 1 \times 0.01024 \end{aligned}$$

$$\underline{P = 0.01024}$$

