

Performance metrics:

Assume time taken for a student to complete this question = 2 seconds

i) 100 question 100 attempts

$$\text{Execution time} = \frac{\text{No. of attempts} \times \text{time taken}}{\text{No. of questions}}$$

$$= \frac{100 \times 2}{100}$$

$$\text{Execution time} = 2\text{s}$$

ii) 10000 question 10000 attempts.

$$\text{Execution time} = \frac{10000 \times 2}{10000}$$

$$= 2\text{s}$$

iii) 100000 question for 1 million attempts.

$$\text{Execution time} = \frac{1,000,000 \times 2}{1,00,000}$$

$$= 20\text{s}.$$

If the no. of attempts > no. of questions, the execution time increases.

∴ The performance gets decreased.