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# AI1110 Assignment 4

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### [CBSE class 9 Exercise 15.1 Q 7]

To know the opinion of the students about the subject statistics, a survey of 200 students was conducted. The data is recorded in the following table.

| Opinion | Number of Students |
|---------|--------------------|
| Like    | 135                |
| Dislike | 65                 |

TABLE I

Find the probability that a student chosen at random

### 1) Likes Statistics,

**Solution:** Let the opinion of the selected student be denoted by the random variable  $X \in \{0,1\}$ . where X=0 represents "Dislike" and X=1 represents "Like".

The desired probability is given by

$$\Pr\left(X=1\right) = \frac{135}{200} = \frac{27}{40} \tag{1}$$

## 2) Does not like it.

Solution: The desired probability is given by

$$\Pr\left(X=0\right) = \frac{65}{200} = \frac{13}{40} \tag{2}$$