

AI1110 Assignment 3

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[CBSE class 10 Exercise 15.1 Q11]

Gopi buys a fish from a shop for his aquarium. The shopkeeper takes out one fish at random from a tank containing 5 male fish and 8 female fish (see Figure 1). What is the probability that the fish taken out is a male fish?



Fig. 1.

Solution:

The number of fish is shown in Table I

Gender	Number
Male	5
Female	8

TABLE I

Let the type of fish be denoted by random variable $X \in \{0, 1\}$, where $X = 0$ represents "Male" and $X = 1$ represents "Female".

The probability that selected fish is male is given by

$$\Pr(X = 0) = \frac{5}{13} \quad (1)$$