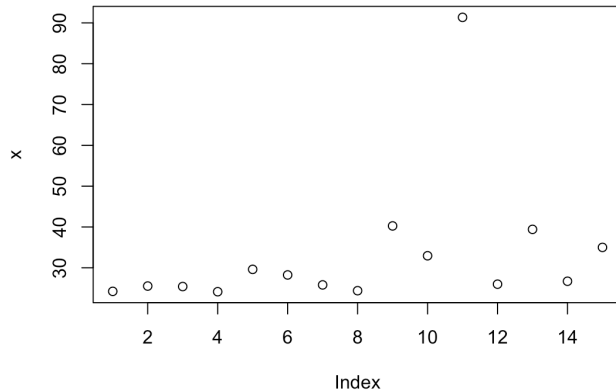


Assignment - Statistics

Q :- 1

Ans : - Plot



Mean(μ) - 33.271

Standard Deviation(σ) - 16.9454

Variance (σ^2) : - = 287.15

Quartiles -

Lower Quartile - 25.41

Middle Quartile - 26.71

Upper Quartile - 35

Q 2: -

Ans : - i) Inter quartile range - 3.5

ii) Right Skewed

iii) Nothing will be affected

Q 3: -

Ans :-

i) Mode will be the two highest bar , which lies between 5 and 7 somewhere. (20,20)

ii) It will be right skewed distribution.

iii)

Q 4:-

Ans : - 0.0248

Q 5:-

Ans :-

(i) The most likely monetary outcome of the business venture : a = 2000 with the highest probability of 0.3.

(ii) The venture is likely to be successful,

$$\text{because } P(x=1000) + P(x=3000) = 0.2 + 0.3 + 0.1 = 0.6$$

(iii) The long term average earning of business venture of this kind -

$$= (0.1)(-2000) + (0.1)(-1000) + (0.2)(0) + (0.2)(1000) + (0.3)(2000) + (0.1)(3000) = 800$$

(iv) The good measure of the risk involved in a venture of this kind is standard deviation .