

Experiment - 1Discrete StatisticsProblem-15 Aim:-

To find the mean median and mode of the following data using R Studio.

Data:-10 age : c(18, rep(19,4), rep(20,5), rep(21,4), 22, 23, 24, 27, 30, 36)a) Syntax15 Mean:-mean(age)Median:-median(age)20 OutputMean:- 22Median:- 20.525 Conclusion:- The mean and median of given data is 22 and 20.5 respectively.

b) Syntax:median age under 25

5

median (age [age < 25])output

10

median - 20Conclusion :- The median of students under the age 25 is 20c) Syntax> xr = table(age)> mode = which(xr == max(xr))> mode

20

outputmode - 20

25

Conclusion - The mode of the above data is 20

Problem-2

Aim Find the mean and median of the following ~~un~~grouped data.

5 Data:

$X = (0, 1, 2, 3)$

$F = (8, 11, 5, 1)$

$Y = \text{rep}(X, F)$

10

mean:-

Syntax:

mean:

> mean = (sum(y)) / (length(y))

> mean

Output: mean = 0.96

20

Median

> median(y)

Output

25

Median = 1

Conclusion

The mean and median of the following data was found to be 0.96 and 1 respectively.

Teacher's Signature:

[Signature]
19/1/24