

Simulation Lab(MC503)

Assignment 5

Try to solve all the problems

1. In R, iris dataset is already available under Mass library. Use iris dataset, find the following things:

- i. Find the number of row and column of iris dataset.
- ii. Find the summary of Sepal.Length and Sepal.Width variable
- iii. Find the types of species and its number.
- iv. Make a another dataset from iris dataset with size of Petal.Length is grater than 2.

2. Create a your own dataset with 5 row and 4 column in R and save this dataset in your system. This dataset must contain at least one categorical variable and one numeric variable(You may take any type of dataset)

3. Use summary function for the following dataset, find the outlier, if any. Also create a data.frame after removing these outlier.

X1= (2,4,6,10,4,7,12,20,5)

X2= (10,5,5,20,4,70,40,12)

X3= (2,4,2.5,34,1.6,9.5,6,2)

4. Create a histogram for following dataset and also label the axis as your X-axis should represent the Marks in Statistics and Y-axis represent number of student. Also find the mean, median and mode for this dataset.

| Marks in Statistics | 20-25 | 25-30 | 30-35 | 35-40 | 40-45 | 45-50 |
|---------------------|-------|-------|-------|-------|-------|-------|
| Number of student | 5 | 4 | 3 | 4 | 2 | 1 |

5. Imports medals_total.csv dataset and find the following things as below.

- i. Total number of gold, silver and bronze model won by India, USA and China.
- ii. Make a two separate histogram for all three types of medals won by China and UK.
- iii. Filter the dataset, only for 5 counties as India, USA, Japan, China and Brazil.
- iv. Use dataset obtained in (iii) and make a pie chart and label them.

6. Use AirPassengers dataset, which is already available in R and find the following things:

- i. Find the total number of passengers who travelled from 1949 to 1960.

- ii. store this AirPassengers dataset in a other dataset and draw a scatter plot between year and number of passengers.
- iii. Create a boxplot of the number of passengers for each months during entire duration.

..... end