

## Lab 7 Assignment

**(1) Create a following dataframe:**

| E_id | Age |
|------|-----|
| 1    | 30  |
| 2    | 25  |
| 3    | 22  |
| 4    | 20  |
| 5    | 35  |
| 6    | 40  |
| 7    | 45  |
| 8    | 43  |
| 9    | 55  |
| 10   | 39  |

- Apply 5 point summary concept on the above data.
- Apply sorting and also find maximum and minimum for the above data.

**(2) Create data frame and perform the following:**

| Student_Name | Marks |
|--------------|-------|
| Krishna      | 75    |
| Madhav       | 70    |
| Gopi         | 65    |
| Kruti        | 50    |
| Mohan        | 90    |
| Shyam        | 80    |
| Priya        | 55    |
| Radhika      | 85    |

- Generate a Pie chart for Marks and save it.
- Use Student name for generating legends.
- The chart should include title for the chart.
- Each segment of chart should be in different color and border should be red.

**(3) Create a data frame: Revenue**

| Profit | Month    |
|--------|----------|
| 20     | January  |
| 30     | February |
| 35     | March    |
| 45     | April    |
| 50     | May      |
| 75     | June     |
| 90     | July     |
| 95     | August   |

- Generate a Bar chart for profit and save the chart.
- The names of the months should appear on X-axis.
- Give proper labels to X-axis and Y-axis.
- The chart should include title for the chart.

5. Each bar of chart should be in different color.
6. The border of the bar should be yellow.

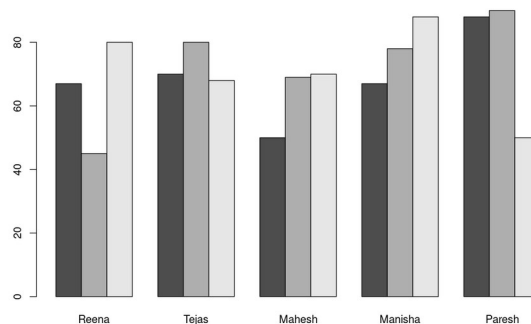
**(4) Consider built-in dataset: mtcars and perform following:**

- i. Generate Line chart on fields weight and milage.
- ii. Give title= Weight vs Milage and X-axis and Y-axis labels
- iii. Line should be displayed with plotting points and with any one color.

**(5) Import the given excel sheet : Student Data**

| Rollno | Name    | Flutter | R  | ML |
|--------|---------|---------|----|----|
| 1      | Reena   | 67      | 45 | 80 |
| 2      | Tejas   | 70      | 80 | 68 |
| 3      | Mahesh  | 50      | 69 | 70 |
| 4      | Manisha | 67      | 78 | 88 |
| 5      | Paresh  | 88      | 90 | 50 |

- i. Calculate average of three subject and round up average marks with 2 digitis after decimal point.
- ii. Generate pie chart with average marks and take student name as a label.
- iii. Give proper title and color to chart. Ues rainbow method for color.
- iv. Generate Bar chart for Name and Three subjects marks like:



- v. Give proper title to graph and color according subjects (3 color for 3 subject)

**(6) Use built-in dataset: mtcars and perform following:**

- i. plot a boxplot for mileage per gallon on the basis of number of cylinders .
- ii. Give proper labels, title and color to graph.

