Day 2| Tasks: Data Visualization

You are provided with an excel file *"iris.xls".*

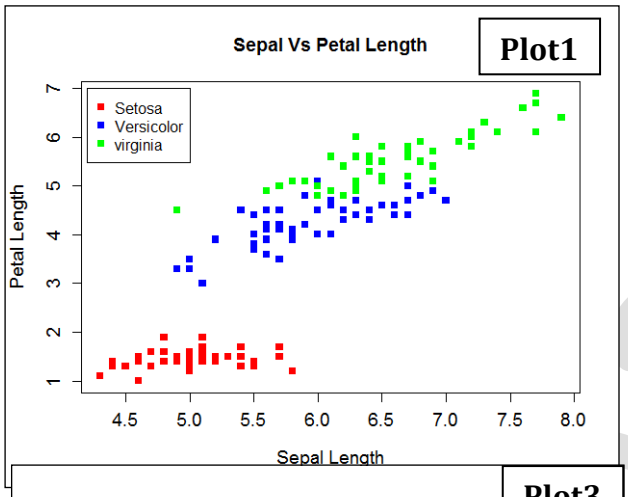
The file contains IRIS data,

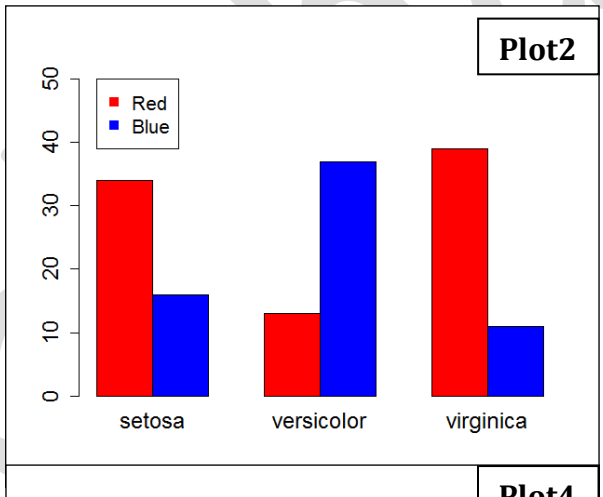
150 flowers, Categorized into 3 plants **(SP: Setosa/Versicolor/Virginica)** and two colors **(Col: Red/Blue)**.

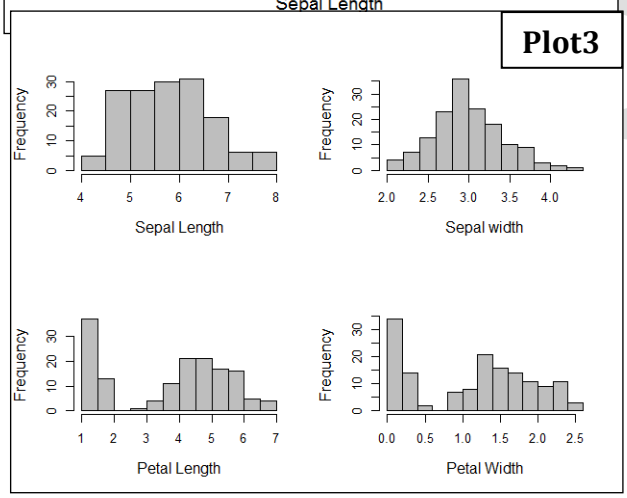
The data consists of **SL** (Sepal length), **SW** (Sepal width), **PL** (Petal length) and **PW** (Petal width) in cm.

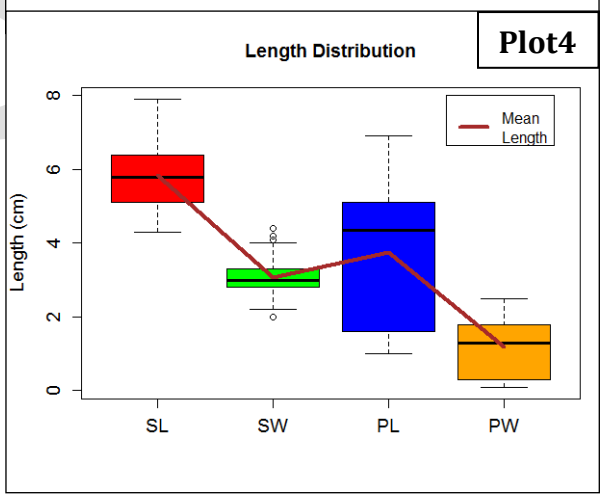
SL	SW	PL	PW	SP	Col
5.1	3.5	1.4	0.2	setosa	Red
4.9	3	1.4	0.2	setosa	Red
4.7	3.2	1.3	0.2	setosa	Red
4.6	3.1	1.5	0.2	setosa	Red
5	3.6	1.4	0.2	setosa	Red
5.4	3.9	1.7	0.4	setosa	Red
4.6	3.4	1.4	0.3	setosa	Red

Task: Load the data in R using appropriate function and extract useful information by data visualization.







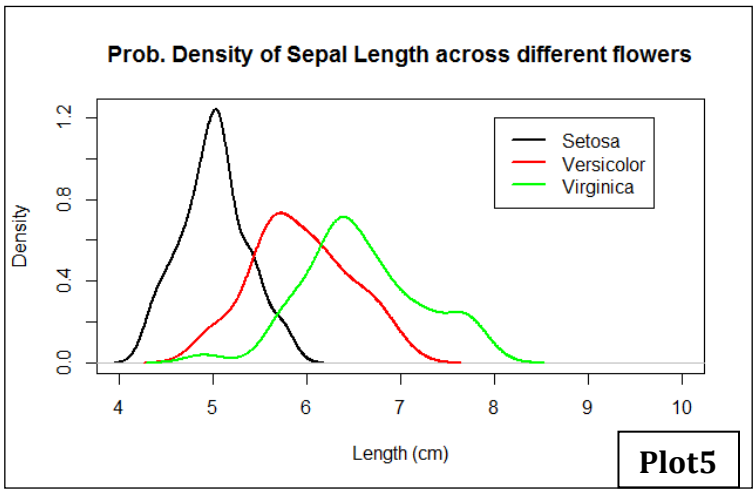


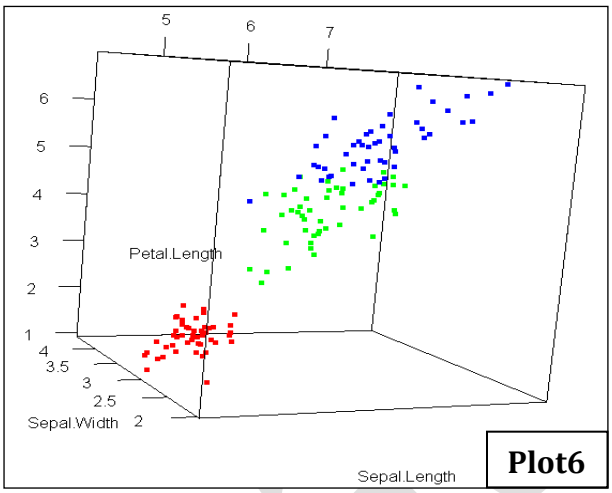
Plot1: Scatter plot of Sepal length vs Petal length of all 150 flowers, color according to species/plants.

Plot2: Barplot showing distribution of Sepal lengths among 6 classes of flowers (3 plants and 2 colors).

Plot3: Multi panel plot showing the histogram of SL, PL, SW, PW of all 150 flowers.

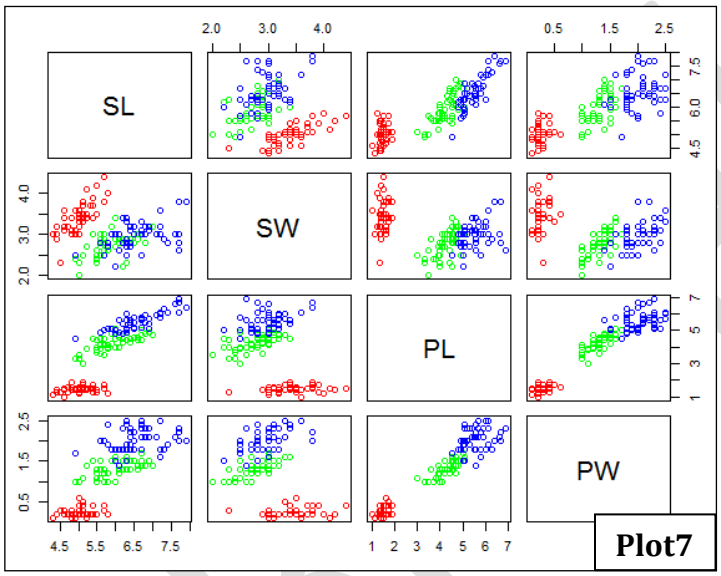
Plot4: Box plot showing SL, SW, PL, PW distribution along with a line joining their mean lengths.

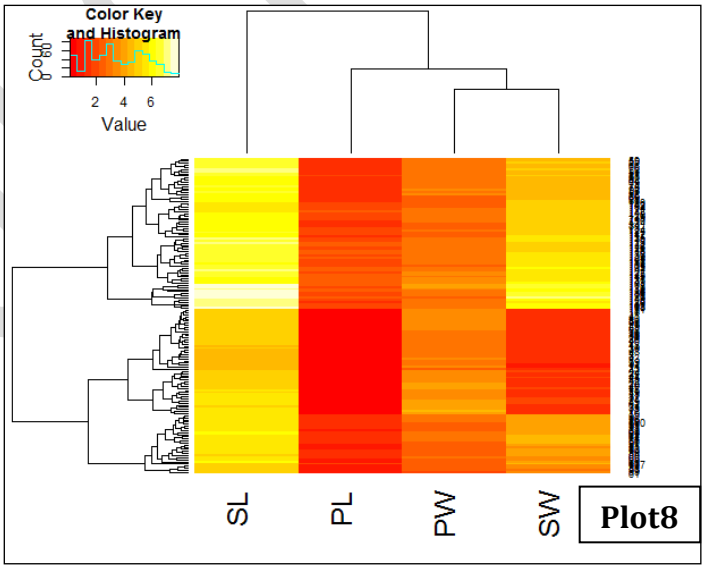




Plot5: Probability density plot of Sepal lengths among three different categories of plants.

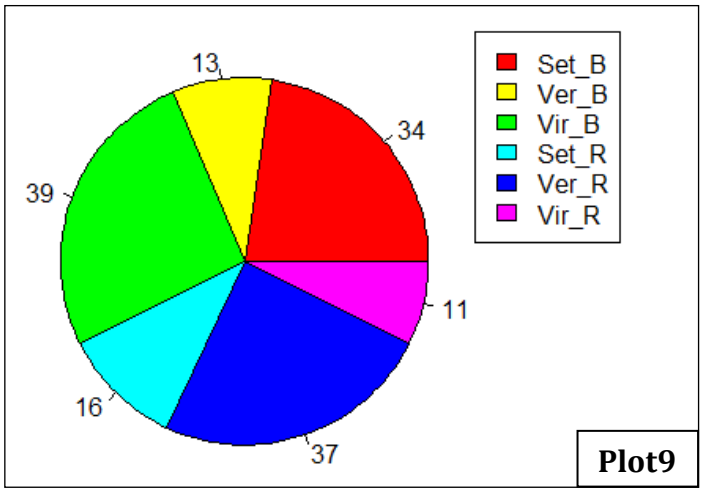
Plot6: 3D plot showing distinct clustering of flowers in terms of SL, SW and PL. Different colors for different plants.

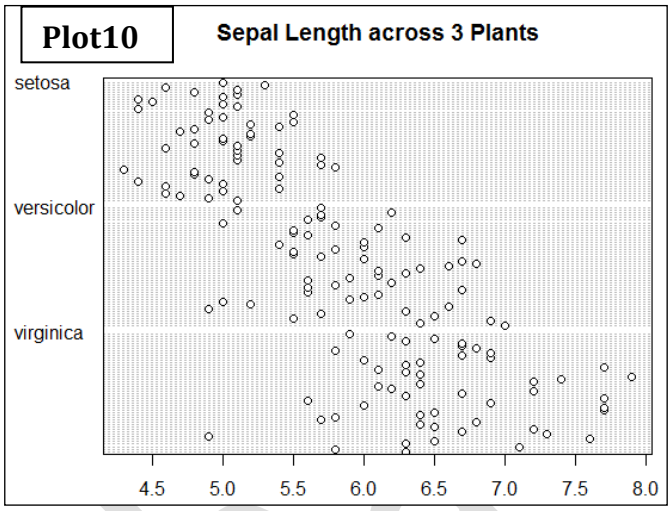




Plot7: Scatter plot matrix showing a global view of the distribution of SL, SW, PL and PW across 3 plants.

Plot8: Heatmap showing clustering of flowers in terms of their SL, SW, PL and PW properties.





Plot9: Pie chart showing the number of flowers in 6 categories (3 plants and 2 colors)

Plot10: Dot chart showing clear distribution of SL among 3 plants.

Notes