## **EXP NO:10 Visualize Data using Any plotting Framework**

#### AIM:

To Visualize Data using Any plotting Frame work using R programming.

#### **PROCEDURE:**

- Install Plotly using pip install plotly if it's not already installed.
- Import the necessary libraries: import plotly.express as px and import pandasas pd.
- Load your dataset into a DataFrame using pd.read\_csv() or other data loadingmethods.
- Explore the dataset to understand its structure, variables, and potential visualizations.
- Choose the appropriate Plotly function (e.g., px.scatter, px.bar,px.line) basedon the type of data and the desired plot.
- Define the x and y axes by specifying the columns from the DataFrame.
- Customize the plot by adding titles, labels, color coding, and other plot-specific attributes.
- Add interactive elements like hover data, tooltips, or facet plots for deeperinsights.
- Render the plot using fig.show() to display it in a web browser or inline in a notebook.
- Save the plot to an HTML file or as a static image using fig.write\_html() or fig.write\_image().

## **CODE:**

#### **Scatter Plot.R:**

#### Bar Chart.R:

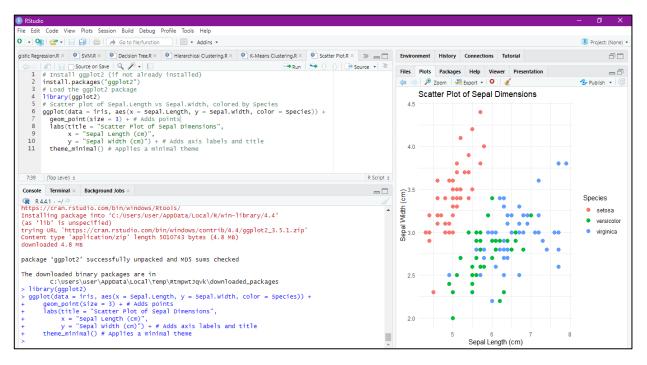
```
# Install ggplot2 (if not already installed)
install.packages("ggplot2")
# Load the ggplot2 package
library(ggplot2)
# Bar plot of Species counts
ggplot(data = iris, aes(x = Species)) +
geom_bar(fill = "steelblue") + # Adds bars filled with steel blue color
labs(title = "Count of Different Species in Iris Dataset",
        x = "Species",
        y = "Count") +
theme_minimal()
```

#### Histogram.R:

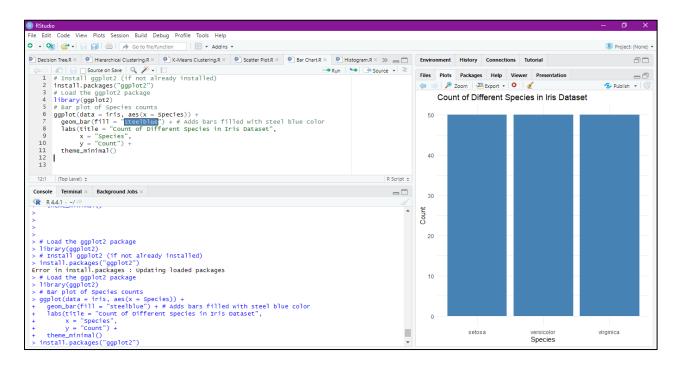
#### **Box Plot.R:**

#### **OUTPUT:**

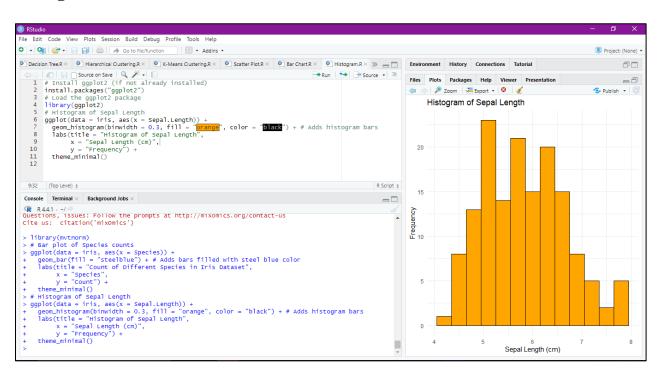
### **Scatter Plot:**



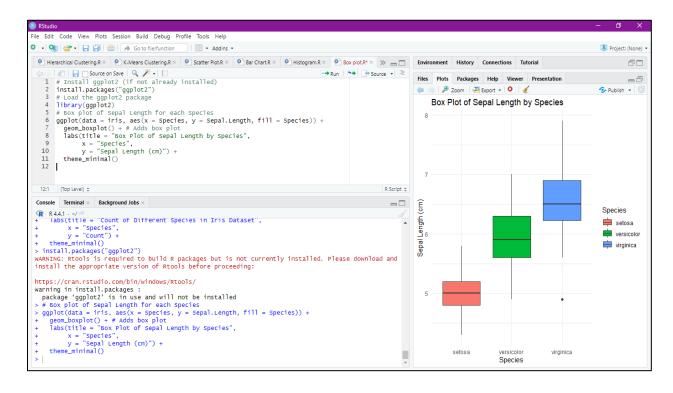
### **Bar Chart:**



# **Histogram:**



### **Box Plot:**



### **RESULT:**

Thus, Visualizing Data using any plotting framework using R programming has been successfully executed.