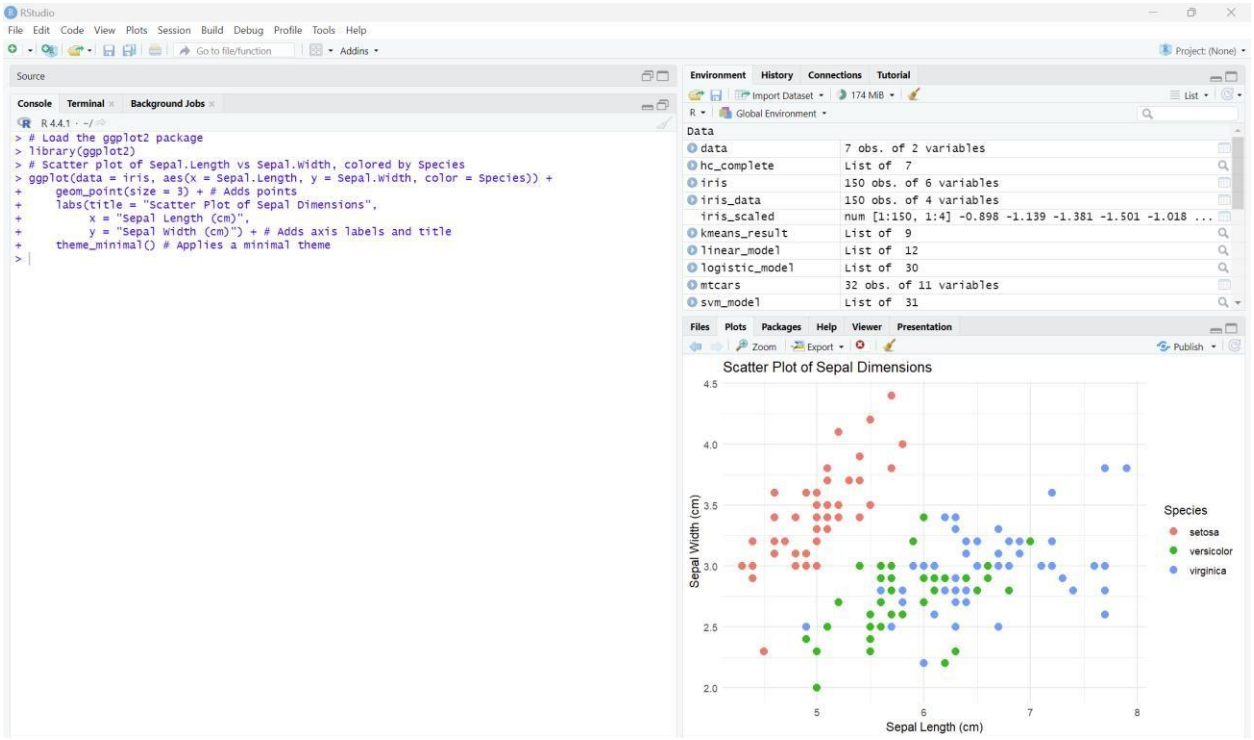
Exp:10

VISUALIZE DATA USING ANY PLOTTING FRAMEWORK

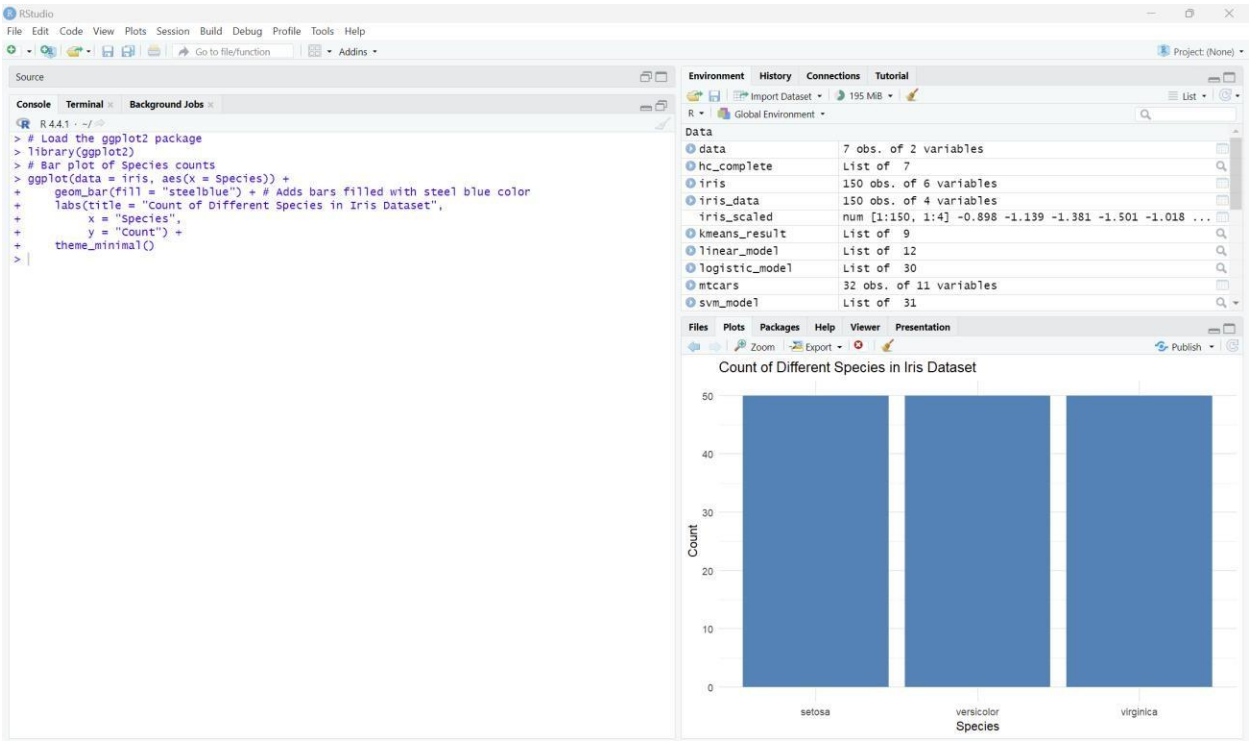
1) SCATTER PLOT

```
# Install ggplot2 (if not already installed)
install.packages("ggplot2")
# Load the ggplot2 package
library(ggplot2)
# Scatter plot of Sepal.Length vs Sepal.Width, colored by Species
ggplot(data = iris, aes(x = Sepal.Length, y = Sepal.Width, color = Species)) +
geom_point(size = 3) + # Adds points
 labs(title = "Scatter Plot of Sepal Dimensions",
 x = "Sepal Length (cm)",
 y = "Sepal Width (cm)") + # Adds axis labels and title
 theme_minimal() # Applies a minimal theme
```



2) BAR CHART

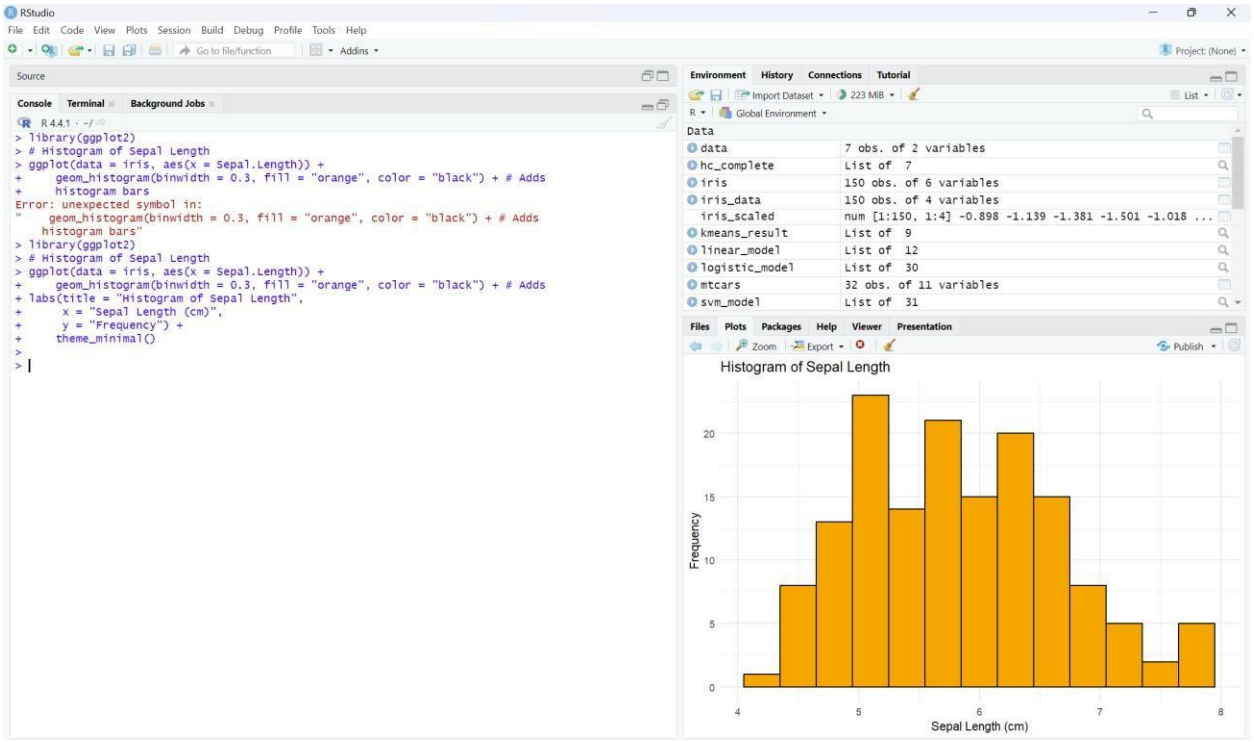
```
# Install ggplot2 (if not already installed)
install.packages("ggplot2")
# Load the ggplot2 package
library(ggplot2)
# Bar plot of Species counts
ggplot(data = iris, aes(x = Species)) +
 geom_bar(fill = "steelblue") + # Adds bars filled with steel blue color
 labs(title = "Count of Different Species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



3) HISTOGRAM

```
# Install ggplot2 (if not already installed)
install.packages("ggplot2")
# Load the ggplot2 package
library(ggplot2)
```

```
# Histogram of Sepal Length
ggplot(data = iris, aes(x = Sepal.Length)) +
 geom_histogram(binwidth = 0.3, fill = "orange", color = "black") + # Adds
histogram bars
 labs(title = "Histogram of Sepal Length",
 x = "Sepal Length (cm)",
 y = "Frequency") +
 theme_minimal()
```



4)BOX PLOT

```
# Install ggplot2 (if not already installed)
install.packages("ggplot2")
# Load the ggplot2 package
library(ggplot2)
# Box plot of Sepal Length for each Species
ggplot(data = iris, aes(x = Species, y = Sepal.Length, fill = Species)) +
 geom_boxplot() + # Adds box plot
```

labs(title = "Box Plot of Sepal Length by Species",

x = "Species",

y = "Sepal Length (cm)") +

theme_minimal()