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)) +

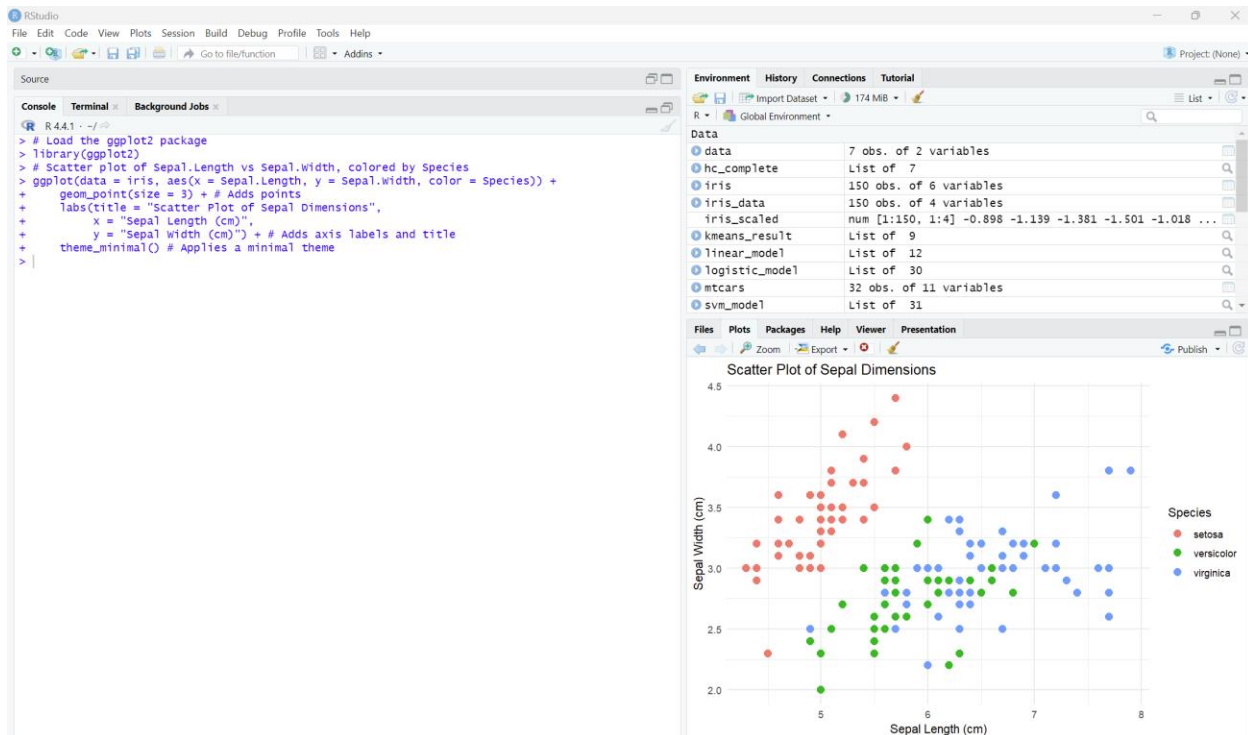 geom_point(size = 3) + # Adds points

 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()
```
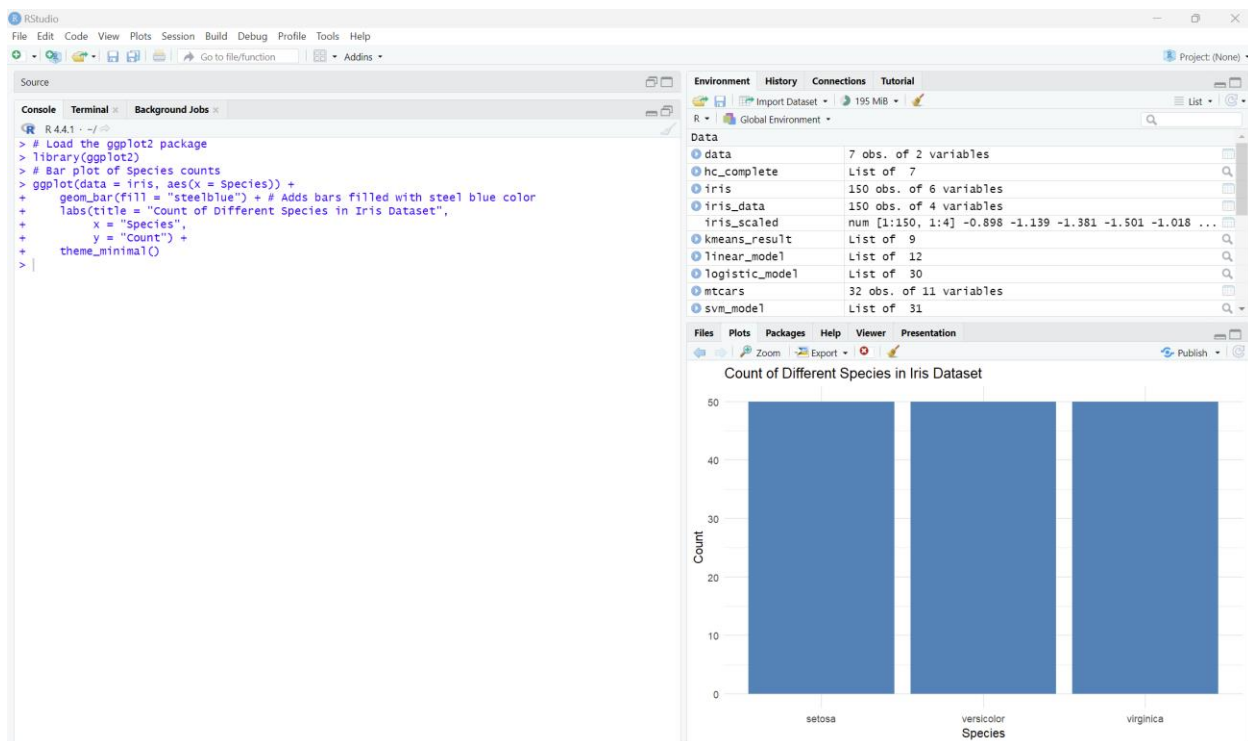

3) HISTOGRAM

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

Histogram of Sepal Length

```r
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()
```
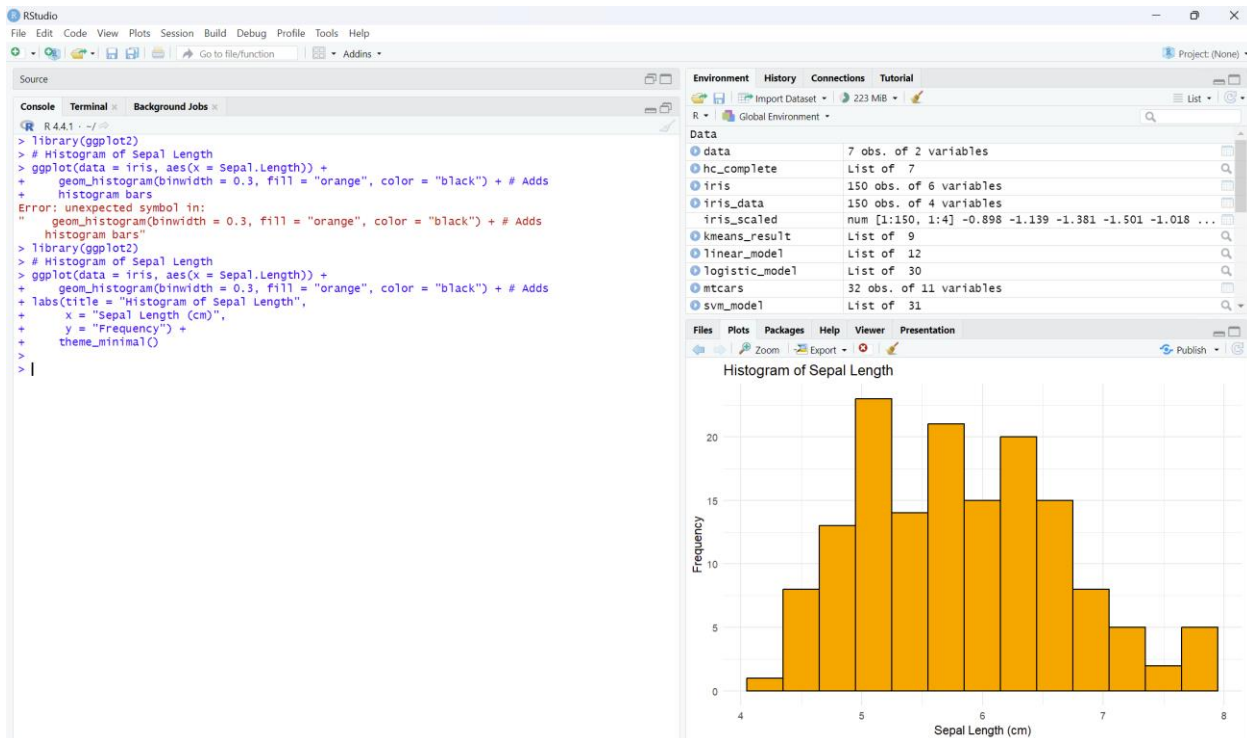

4)BOX PLOT

```r
# 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
```

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

x = "Species",

y = "Sepal Length (cm)") +

theme_minimal()
```