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)) +

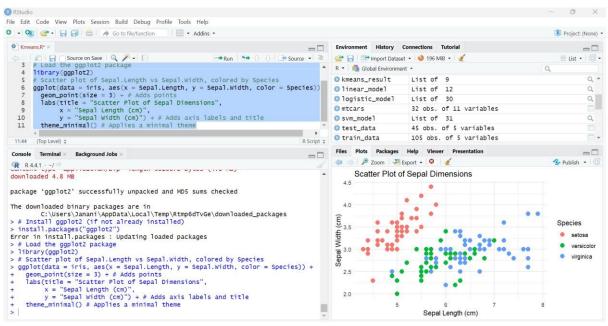
geom point(size = 3) + # Adds points

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)

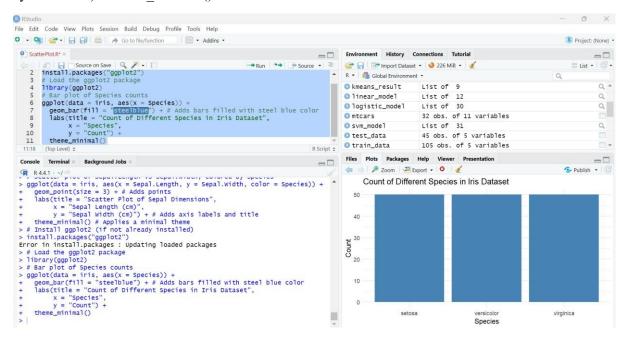
```
# Bar plot of Species counts ggplot(data
```

$$=$$
 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)) +

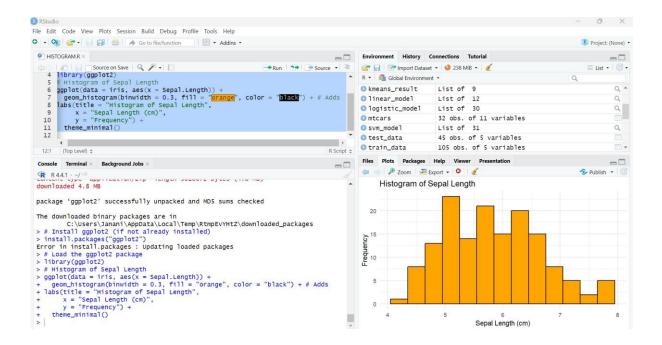
geom histogram(binwidth = 0.3, fill = "orange", color = "black") + # Adds

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()
```

