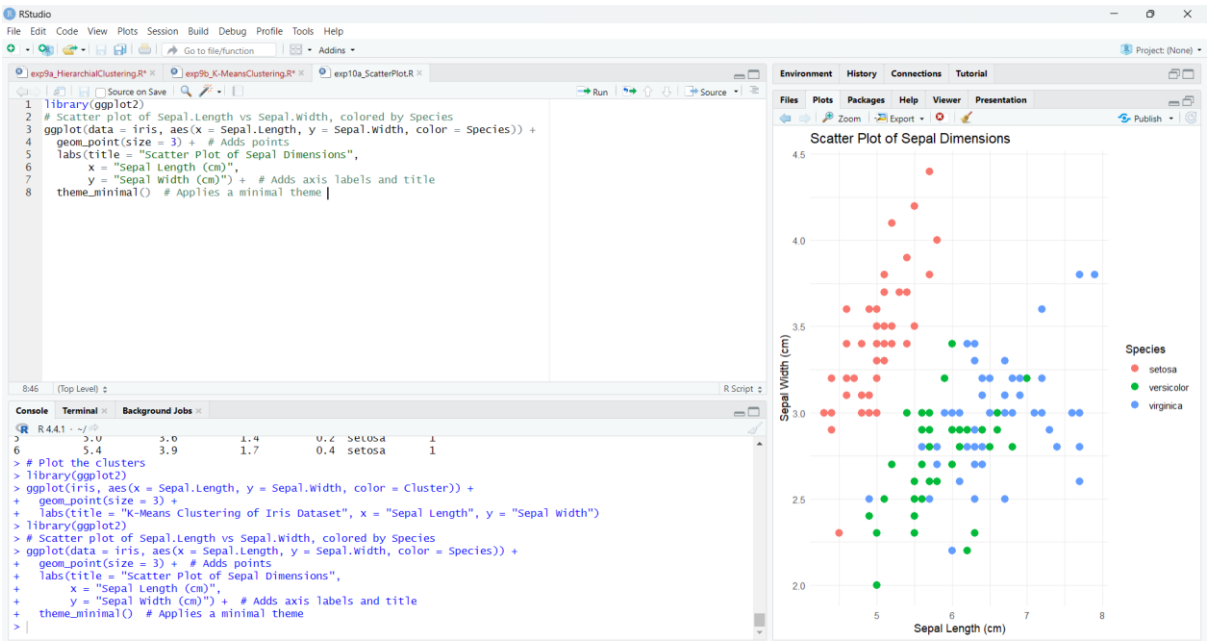
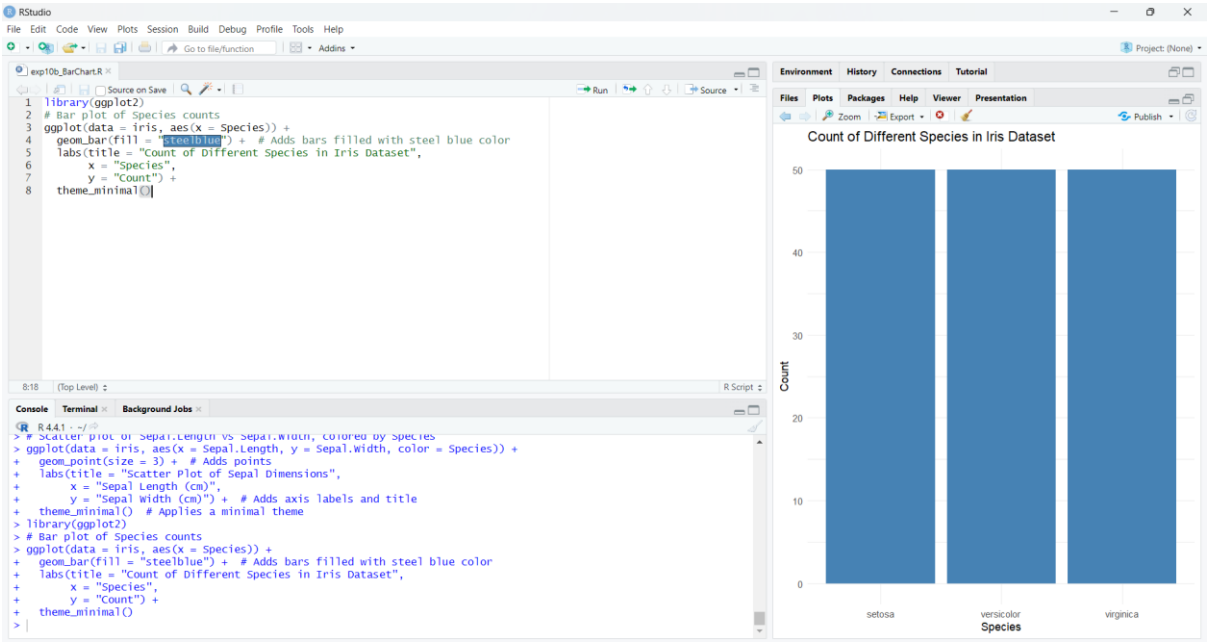
10a

```
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
```



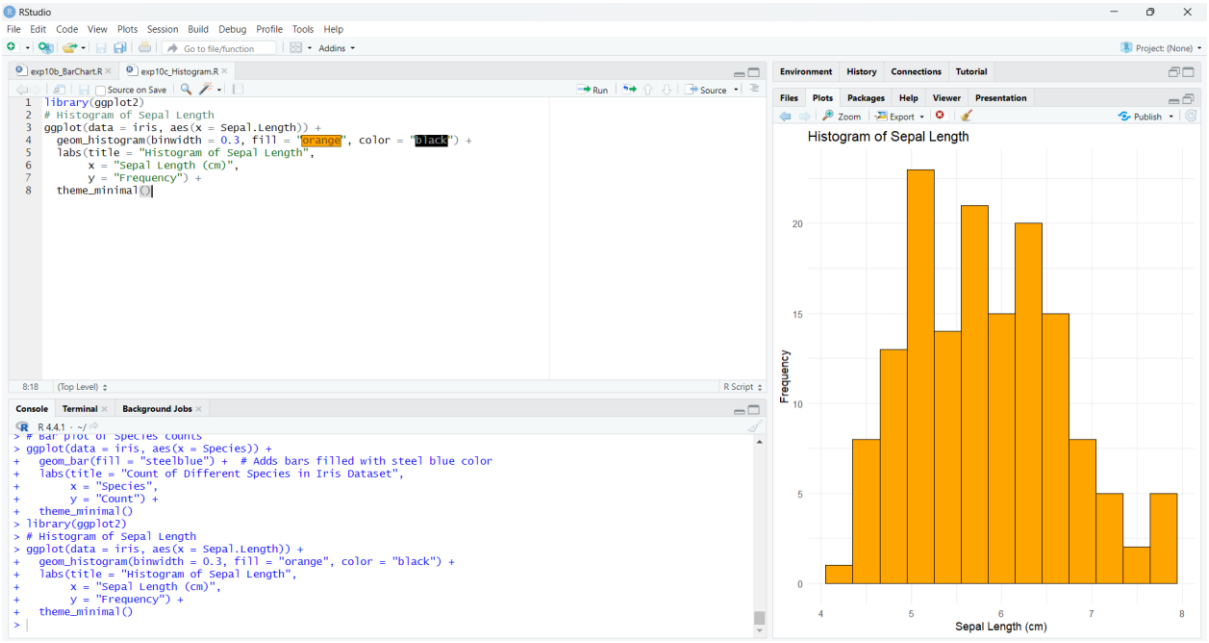
10b

```
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()
```



10c

```
library(ggplot2)

# Histogram of Sepal Length

ggplot(data = iris, aes(x = Sepal.Length)) +

 geom_histogram(binwidth = 0.3, fill = "orange", color = "black") +

 labs(title = "Histogram of Sepal Length",

      x = "Sepal Length (cm)",

      y = "Frequency") +

 theme_minimal()
```



10d

```
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()
```