

## EXP 7

```
# Load required library
library(ggplot2)
```

```
# Create a custom airquality dataset
```

```
airquality <- data.frame(
  Ozone = c(41, 36, 12, 18, 23, 19, 8, 16, 11, 14),
  Solar.R = c(190, 118, 149, 313, 299, 99, 19, 194, 256, 290),
  Wind = c(7.4, 8.0, 12.6, 11.5, 8.6, 13.8, 20.1, 8.6, 9.7, 9.2),
  Temp = c(67, 72, 74, 62, 65, 59, 61, 69, 74, 76),
  Month = c(5, 5, 5, 5, 5, 5, 5, 5, 5, 5),
  Day = c(1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
)
```

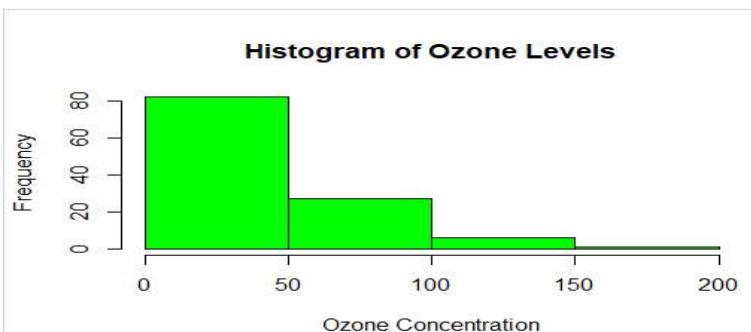
```
# Bar Plot - Frequency of Observations per Month
```

```
barplot(table(airquality$Month),
  main="Bar Plot of Month-wise Observations",
  xlab="Month",
  ylab="Frequency",
  col="blue")
```



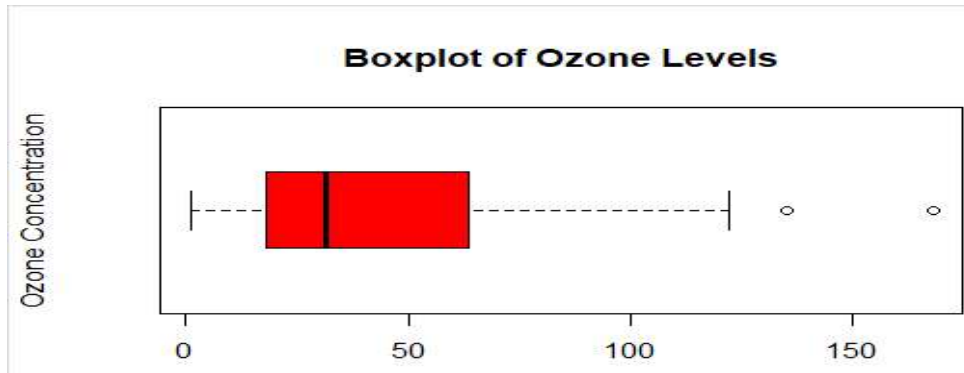
```
# Histogram - Distribution of Ozone Levels
```

```
hist(airquality$Ozone,
  main="Histogram of Ozone Levels",
  xlab="Ozone Concentration",
  col="green",
  border="black",
  breaks=5)
```



```
# Box Plot - Summary of Ozone Levels
```

```
boxplot(airquality$Ozone,  
        main="Boxplot of Ozone Levels",  
        ylab="Ozone Concentration",  
        col="red",  
        horizontal=TRUE)
```



```
# Scatter Plot - Relationship between Temperature and Ozone Levels
```

```
plot(airquality$Temp, airquality$Ozone,  
     main="Scatter Plot of Temperature vs Ozone",  
     xlab="Temperature (°F)",  
     ylab="Ozone Concentration",  
     col="purple",  
     pch=19)
```

