IT24102555-Weerathunga B.A

1.

```
setwd("C:\\Users\\IT24102555\\Desktop\\IT24102555-Lab05")
getwd()

Delivery_Times<-read.table("Exercise - Lab 05.txt",header=TRUE)
print(Delivery_Times)
```

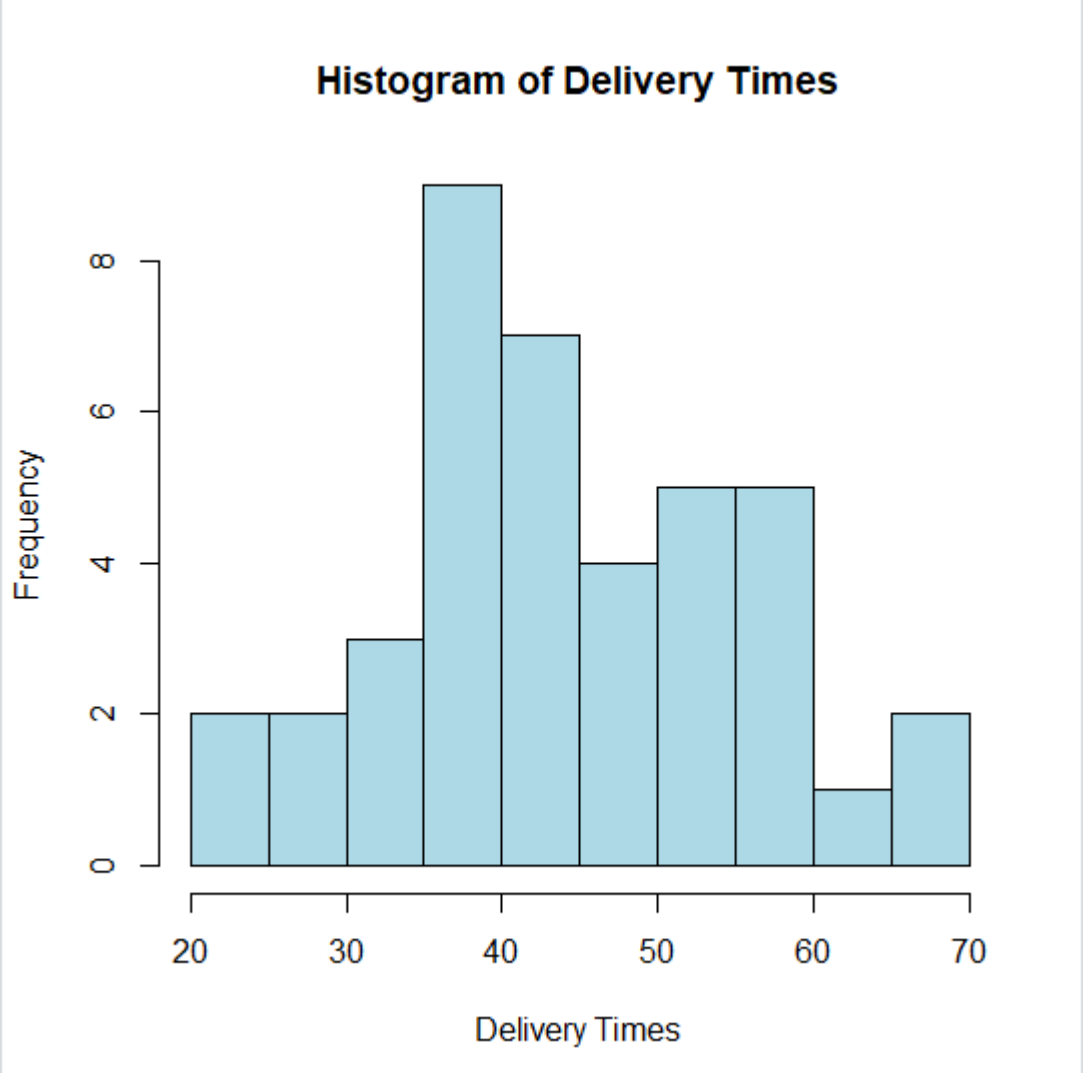
```
> setwd("C:\\Users\\IT24102555\\Desktop\\IT24102555-Lab05")
> getwd()
[1] "C:/Users/IT24102555/Desktop/IT24102555-Lab05"
> Delivery_Times<-read.table("Exercise - Lab 05.txt",header=TRUE)
```

```
print(Delivery_Times)
```

| | Delivery_Time_.minutes. |
|---|---|
| 1 | 34 |
| 2 | 54 |
| 3 | 47 |
| 4 | 29 |
| 5 | 39 |
| 6 | 61 |
| 7 | 20 |
| 8 | 40 |
| 9 | 57 |
| 10 | 36 |
| 11 | 38 |
| 12 | 44 |
| 13 | 59 |
| 14 | 38 |

```
hist(Delivery_Times$Delivery,
     breaks = seq(20, 70, by = 5),
     right = FALSE,
     main = "Histogram of Delivery Times",
     xlab = "Delivery Times",
     ylab = "Frequency",
     col = "lightblue",
     border = "black")
```

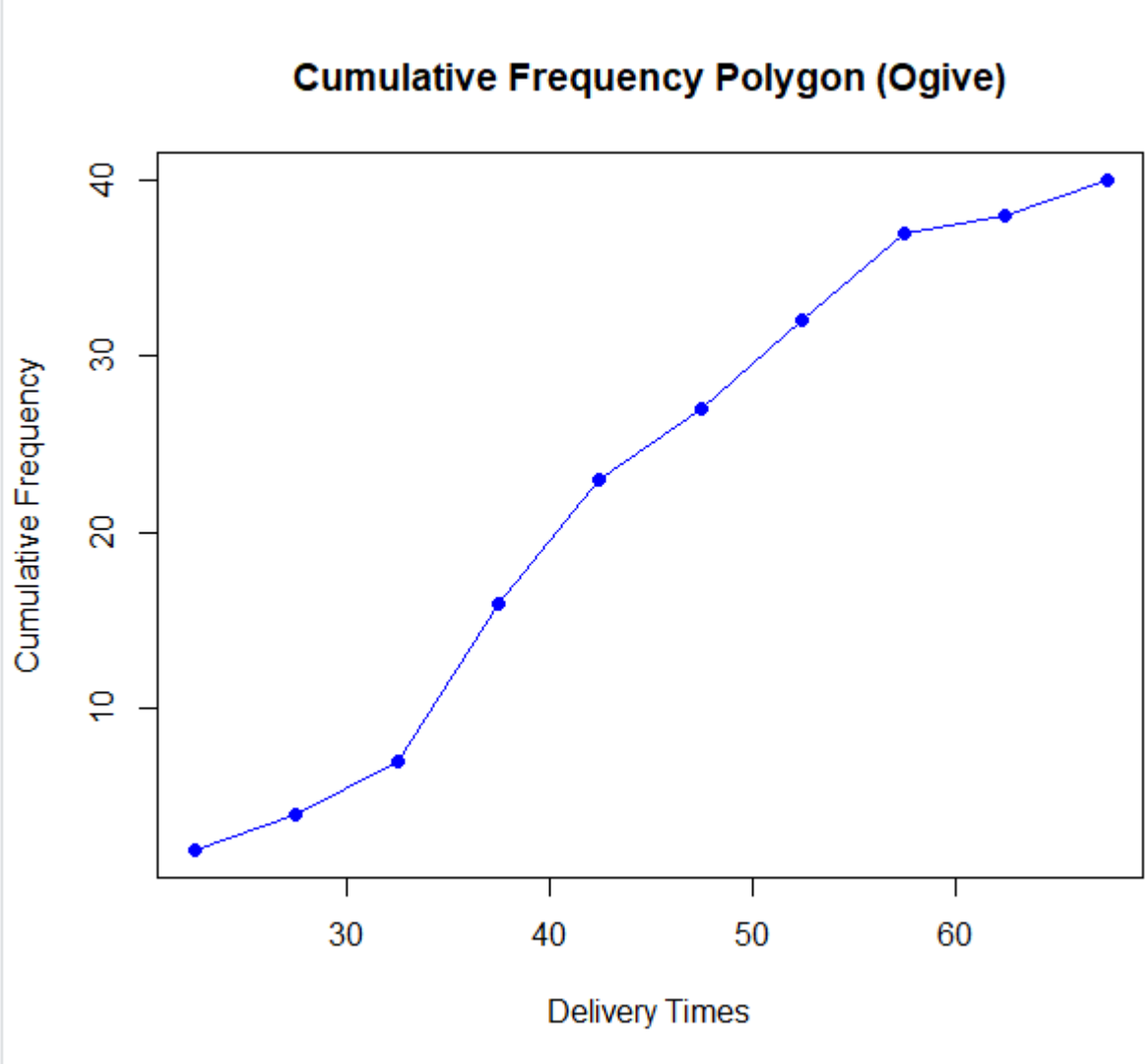
```
> hist(Delivery_Times$Delivery,
+      breaks = seq(20, 70, by = 5),
+      right = FALSE,
+      main = "Histogram of Delivery Times",
+      xlab = "Delivery Times",
+      ylab = "Frequency",
+      col = "lightblue",
+      border = "black")
>
```



3.This is a Right-skewed distribution.

```r
hist_data <- hist(Delivery_Times$Delivery,
                  breaks = seq(20, 70, by = 5),
                  right = FALSE,
                  plot = FALSE)


cumulative_freq <- cumsum(hist_data$counts)

plot(hist_data$mids, cumulative_freq,
     type = "o",
     main = "Cumulative Frequency Polygon (Ogive)",
     xlab = "Delivery Times",
     ylab = "Cumulative Frequency",
     pch = 16,
     col = "blue")
```

```r
hist_data <- hist(Delivery_Times$Delivery,
                  breaks = seq(20, 70, by = 5),
                  right = FALSE,
                  plot = FALSE)


cumulative_freq <- cumsum(hist_data$counts)


plot(hist_data$mids, cumulative_freq,
     type = "o",
     main = "Cumulative Frequency Polygon (Ogive)",
     xlab = "Delivery Times",
     ylab = "Cumulative Frequency",
     pch = 16,
     col = "blue")
```


Cumulative Frequency Polygon (Ogive)
Cumulative Frequency
10
20
30
40
30
40
50
60
Delivery Times