Lab sheet 05

IT24102483

Premathilaka H.P.S.M

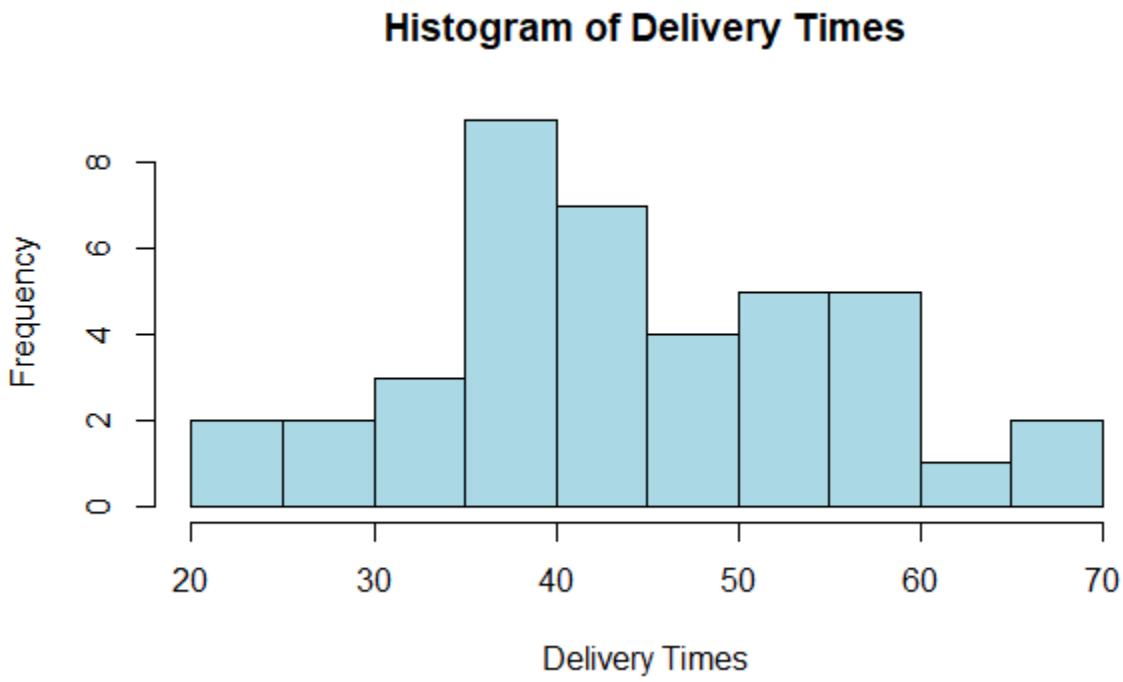
01.

```
setwd("C:\\Users\\IT24102483\\Downloads\\IT24102483")

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

```
> setwd("C:\\Users\\IT24102483\\Downloads\\IT24102483")
>
> 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
15                      40
16                      40
17                      67
18                      66
19                      55
20                      48
21                      52
22                      59
23                      35
24                      56
25                      32
26                      38
27                      54
28                      30
29                      43
30                      36
31                      42
```

```
29                      43
30                      36
31                      42
32                      20
33                      27
34                      38
35                      54
36                      43
37                      45
38                      51
39                      36
40                      47
>
>
> 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")
>
```



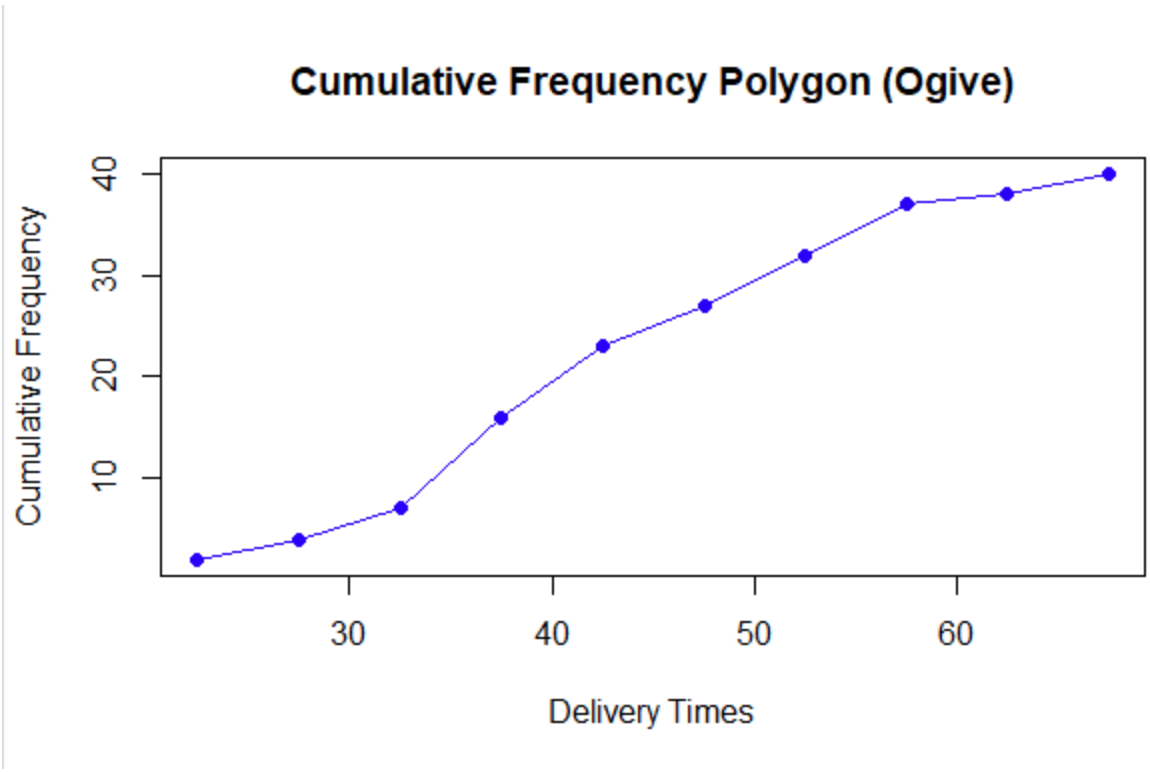
3.This is a Right-skewed distribution.

```
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")
```

```
> 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$mids, cumulative_freq,
+      type = "o",
+      main = "Cumulative Frequency Polygon (Ogive)",
+      xlab = "Delivery Times",
+      ylab = "Cumulative Frequency",
+      pch = 16,
+      col = "blue")
> hist(Delivery_Times$Delivery,
+      breaks = seq(20, 70, by = 5),
+      right = FALSE,
+      main = "Histogram of Delivery Times",
+      xlab = "Delivery Times",
+      ylab = "Frequency",
+      col = "lightblue",
+      border = "black")
```


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