

IT24100092

Kularathne I M A G

PS Lab 05

Q1

```
1 getwd()
2 setwd("C:\\Users\\user\\OneDrive - Sri Lanka Institute of Information Technology\\new\\OneDrive - Sri Lanka Institute of Information Technology\\Desktop\\IT24100092")
3 getwd()
4
5 #1
6 Delivery_Times<-read.table("Exercise - Lab 05.txt",header=TRUE)
7 print(Delivery_Times)
```

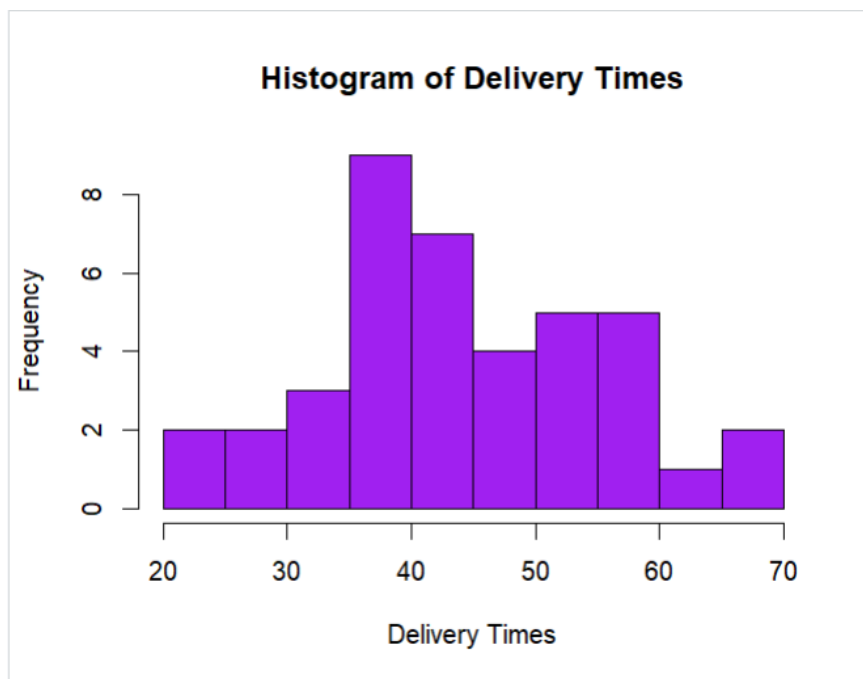


```
> getwd()
[1] "C:/Users/user/OneDrive - Sri Lanka Institute of Information Technology/new/OneDrive - Sri Lanka Institute of Information Technology/Desktop/IT24100092"
> setwd("C:\\Users\\user\\OneDrive - Sri Lanka Institute of Information Technology\\new\\OneDrive - Sri Lanka Institute of Information Technology\\Desktop\\IT24100092")
> getwd()
[1] "C:/Users/user/OneDrive - Sri Lanka Institute of Information Technology/new/OneDrive - Sri Lanka Institute of Information Technology/Desktop/IT24100092"
> #1
> 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
32                   20
33                   27
34                   38
35                   54
36                   43
37                   45
38                   51
39                   36
40                   47
```

Q2

```
#2
hist(Delivery_Times$Delivery,
      breaks = seq(20, 70, by = 5),
      right = FALSE,
      main = "Histogram of Delivery Times",
      xlab = "Delivery Times",
      ylab = "Frequency",
      col = "purple",
      border = "black")

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



Q3

This is a Right-skewed distribution.

Q4

```
#4  
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 = "red")
```

