

IT24102542

Ramanayaka O.R.

Lab 5

Exercise

01.

```
1 setwd("C:\\Users\\Ovin\\Desktop\\IT24102542_PS_Lab05")
2 getwd()
3 Delivery_times <- read.table("Exercise - Lab 05.txt",header=TRUE)
4 print(Delivery_times)
5
```

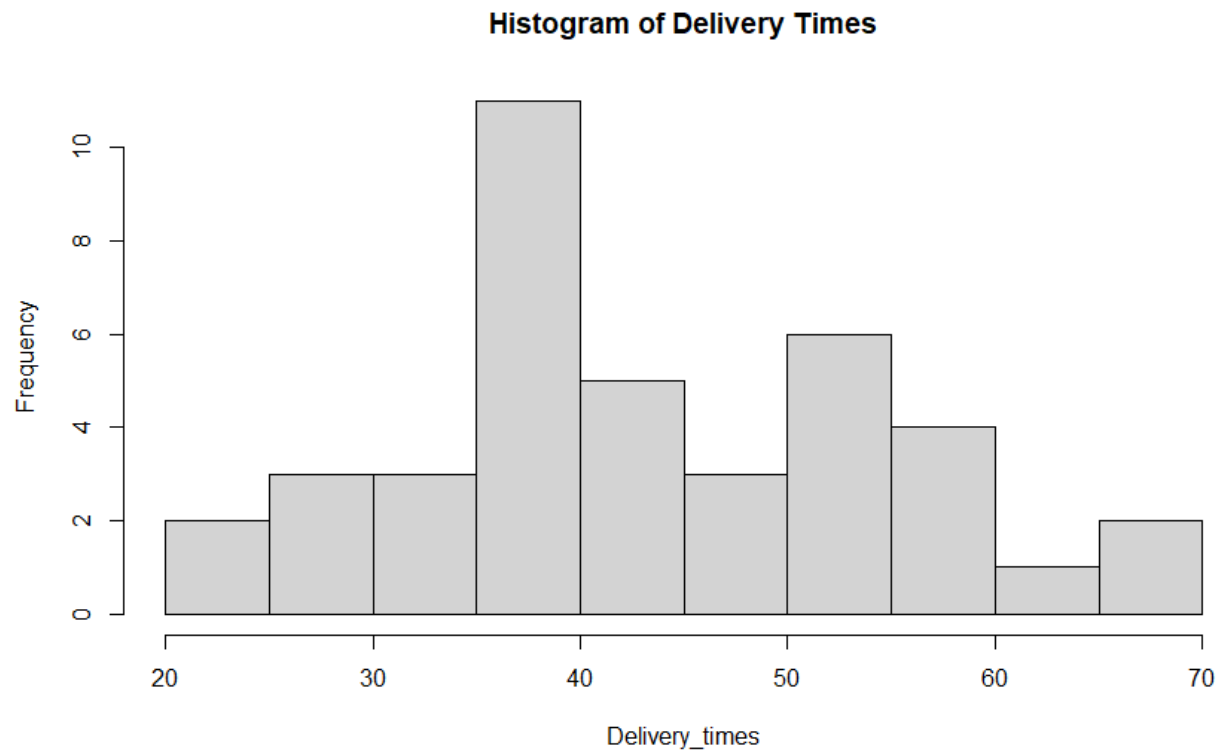
```

> setwd("C:\\Users\\Ovin\\Desktop\\IT24102542_PS_Lab05")
> getwd()
[1] "C:/Users/Ovin/Desktop/IT24102542_PS_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
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                     30

```

```
#Q2
hist(Delivery_times$Delivery, breaks=seq(20,70,by=5),right=TRUE,
main="Histogram of Delivery Times",xlab="Delivery_times",ylab="Frequency")
|

> #Q2
> hist(Delivery_times$Delivery, breaks=seq(20,70,by=5),right=TRUE,
+ main="Histogram of Delivery Times",xlab="Delivery_times",ylab="Frequency")
> |
```



03.

The distribution of delivery times is approximately symmetric and unimodal, with the peak around 35-40 minutes. It is not strongly skewed.

04.

```

delivery_times_freq <- hist(Delivery_times$Delivery,
                           breaks= seq(20,70,by=5),
                           right=TRUE,
                           plot= FALSE)
cumulative_freq <- cumsum(Delivery_times_freq$counts)

plot(Delivery_times_freq$mids, cumulative_freq, type= "o",
     main="Cumulative Frequency Polygon (Ogive) of Delivery Times",
     xlab="Delivery Times",
     ylab="Cumulative Frequency",
     pch=16)

> Delivery_times_freq <- hist(Delivery_times$Delivery,
+                             breaks= seq(20,70,by=5),
+                             right=TRUE,
+                             plot= FALSE)
> cumulative_freq <- cumsum(Delivery_times_freq$counts)
>
> plot(Delivery_times_freq$mids, cumulative_freq, type= "o",
+      main="Cumulative Frequency Polygon (Ogive) of Delivery Times",
+      xlab="Delivery Times",
+      ylab="Cumulative Frequency",
+      pch=16)
> |

```

