Labshee,main=””t 05 PS

Amarakoon D.D IT24103864

```
getwd()
setwd("C:\\Users\\dilmi\\Desktop\\IT24103864")
Delivery.Times<-read.table("Exercise - Lab 05.txt",header =TRUE)
hist(Delivery.Times$Delivery_Time_,breaks=seq(20,70,by=5),right=TRUE,main="Histogram of Delivery Times",xlab="Deli
delivery_freq<-table(cut(Delivery.Times$Delivery_Time_,breaks=seq(20,70,by=5)))
cum_freq<-cumsum(delivery_freq)
plot(seq(20,70,by=5)[-1],cum_freq="o",main="Cumulative Frequency Polygon",
     xlab="Delivery Times",ylab="Cumulative Frequency",
     xlim=c(20,70),ylim=c(0,max(cum_freq)+5)
```

Figure 1

Figure 1

```
> bin_midpoints <- seq(22.5, 67.5, by=5)  # midpoints of intervals 20-25, 25-30, etc.
>
> # Plot the cumulative frequency polygon (ogive)
> plot(bin_midpoints, cum_freq, type="o",
+      col="blue", xlab="Delivery Time", ylab="Cumulative Frequency",
+      main="Cumulative Frequency Polygon (Ogive)")
> hist(Delivery_Times$Delivery,
+      breaks=9,
+      xlim=c(20, 70),
+      main="Histogram of Delivery Times",
+      xlab="Delivery Time",
+      col="lightblue",
+      right=TRUE)
> Delivery_Times <- read.table("Exercise - Lab 05.txt", header = TRUE)
>
```

Figure 2

```
+      right=TRUE)
> Delivery_Times <- read.table("Exercise - Lab 05.txt", header = TRUE)
> # Histogram
> hist(Delivery_Times$Delivery,
+      breaks=9,
+      xlim=c(20, 70),
+      main="Histogram of Delivery Times",
+      xlab="Delivery Time",
+      col="lightblue",
+      right=TRUE)
> # The histogram suggests that the delivery times are bimodal,
> # with a peak around 40 minutes and another smaller peak around 50-60 minutes.
> # The distribution is slightly right-skewed, as there are fewer instances of
> # delivery times above 60 minutes.
>
```

3. The histogram in Figure 2 shows the distribution of delivery times.

- The shape appears to be **slightly right-skewed (positively skewed)**.
- Most of the frequencies are concentrated around the **40–50** range.
- There are **fewer observations** in the higher delivery times (60–70), which creates a tail extending to the right.

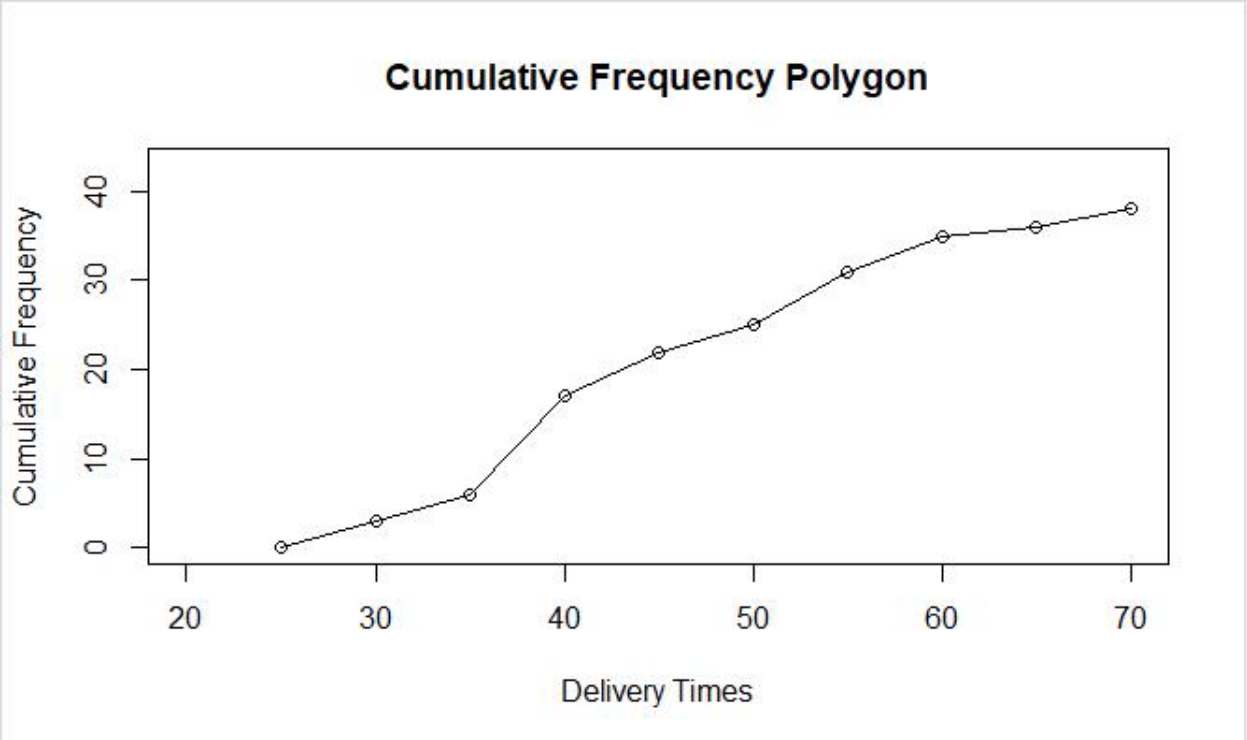
Cumulative Frequency Polygon
Cumulative Frequency
0
10
20
30
40
20
30
40
50
60
70
Delivery Times

Figure 3