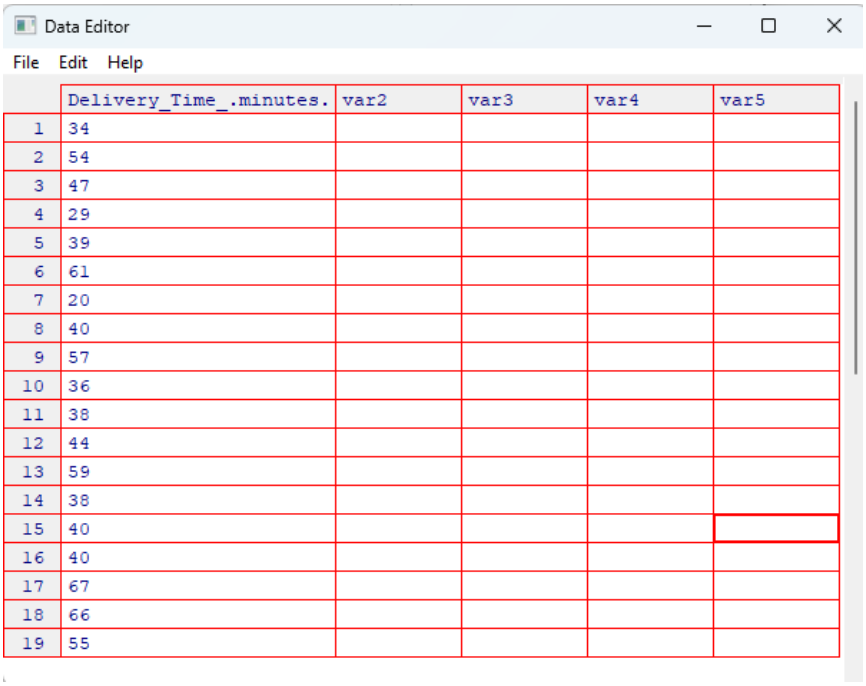
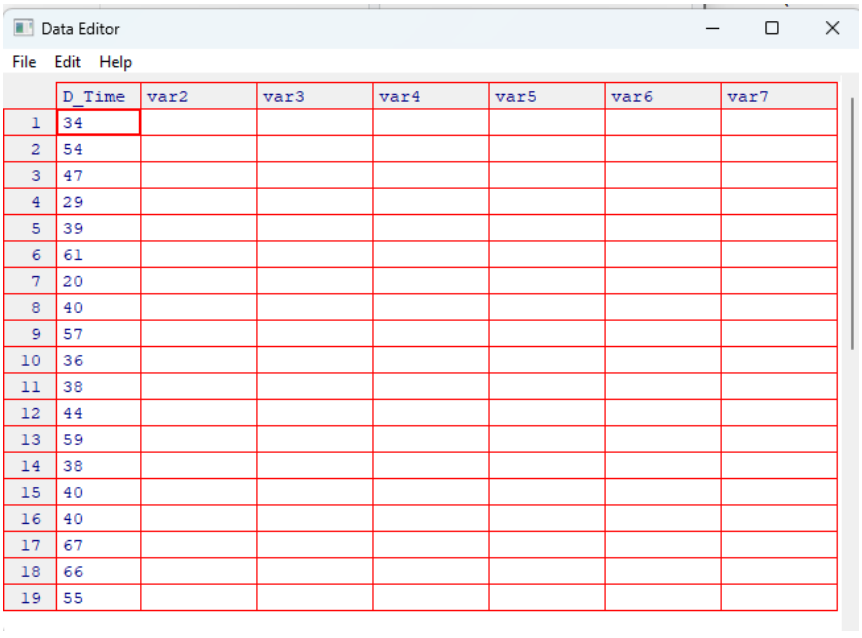
Q1).

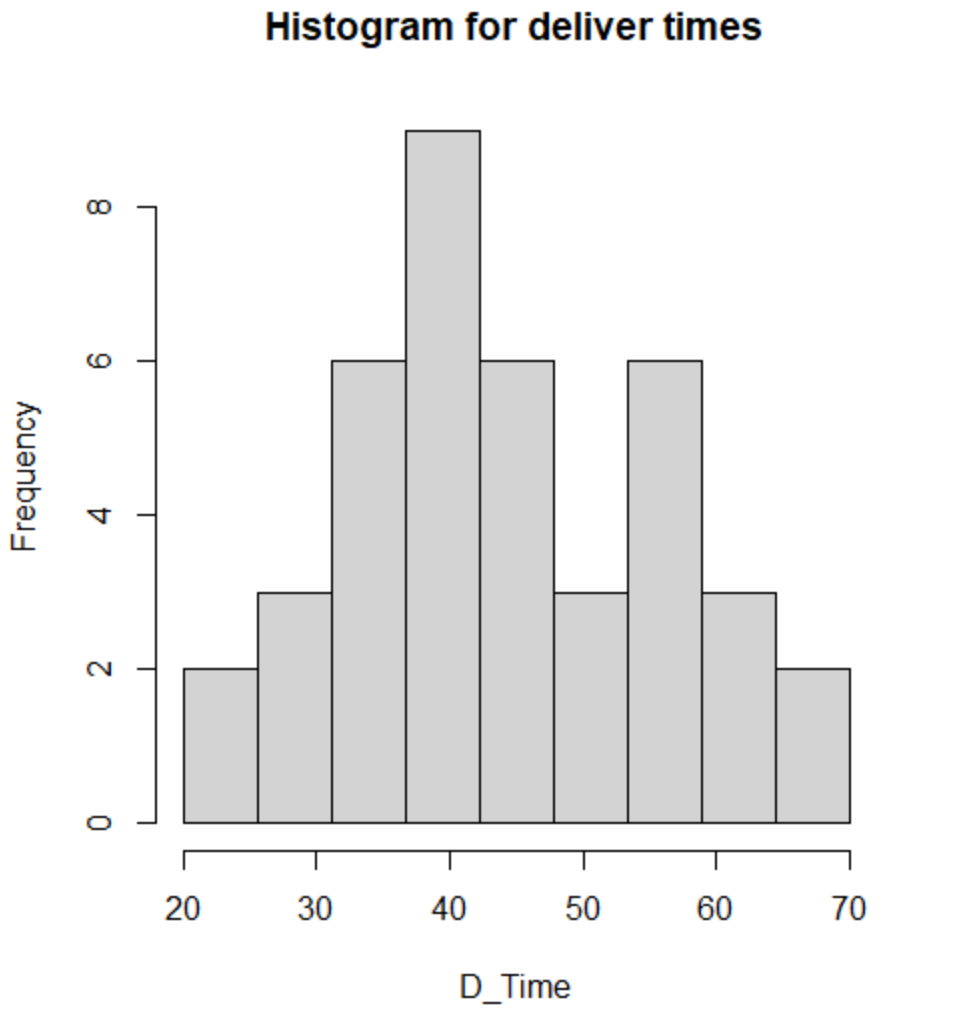


	Delivery_Time_.minutes.	var2	var3	var4	var5
1	34				
2	54				
3	47				
4	29				
5	39				
6	61				
7	20				
8	40				
9	57				
10	36				
11	38				
12	44				
13	59				
14	38				
15	40				
16	40				
17	67				
18	66				
19	55				

Q2).



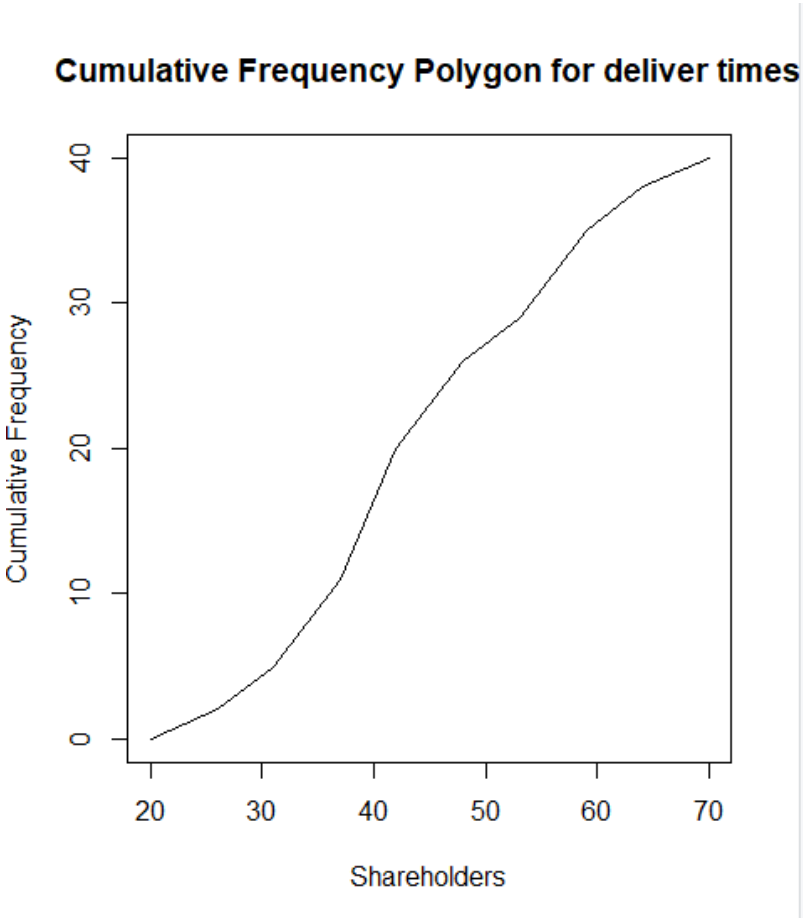
	D_Time	var2	var3	var4	var5	var6	var7
1	34						
2	54						
3	47						
4	29						
5	39						
6	61						
7	20						
8	40						
9	57						
10	36						
11	38						
12	44						
13	59						
14	38						
15	40						
16	40						
17	67						
18	66						
19	55						



Q3).

```
> #Most of the data is at the low end, forming a peak on the left, and a few high values stretch the graph out to the right.
>
```

Q4).




```
fix(Delivery_Times)
attach(Delivery_Times)

#Q2
names(Delivery_Times)<-c("D_Time")
attach(Delivery_Times)
fix(Delivery_Times)
histogram<-hist(D_Time,main="Histogram for deliver times",breaks = seq(20, 70,length = 10),right = FALSE)

#Q3
#Most of the data is at the low end, forming a peak on the left, and a few high values stretch the graph out to the right.

#Q4
breaks <- round(histogram$breaks)
freq <- histogram$counts
mids <- histogram$mids

classes <- c()

##Creating a "for" loop to assign classes of the frequency distribution into "Classes" variable

for(i in 1:length(breaks)-1){
  Classes[i] <- paste0("[", breaks[i], ",", breaks[i+1], ")")
}

#get cumulative frequencies
cum.freq <- cumsum(freq)

new <- c()

## Using "for" loop to store cumulative frequencies in order to get the ogive
for(i in 1:length(breaks)){
  if(i==1){
    new[i] = 0
  } else {
    new[i] = cum.freq[i-1]
  }
}

plot(breaks, new, type = 'l', main = "Cumulative Frequency Polygon for deliver times", xlab = "Shareholders", ylab = "Cumulative Frequency", ylim = c(0,max(cum.freq)))

```

Console | Terminal | Background Jobs

R 4.4.0 · C:/Users/it24100680/Desktop/IT24100680/

```
R is free software and comes with ABSOLUTELY NO WARRANTY.
You are welcome to redistribute it under certain conditions.
Type 'license()' or 'licence()' for distribution details.

  Natural language support but running in an English locale

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

> setwd("C:\\Users\\it24100680\\Desktop\\IT24100680")
> Delivery_Times<-read.table("Exercise - Lab 05.txt",header=TRUE,sep = ",")
> fix(Delivery_Times)
> attach(Delivery_Times)
>
> #Q2
> names(Delivery_Times)<-c("D_Time")
> #Q2
> names(Delivery_Times)<-c("D_Time")
> attach(Delivery_Times)
> fix(Delivery_Times)
> histogram<-hist(D_Time,main="Histogram for deliver times",breaks = seq(20, 70,length = 10),right = FALSE)
>
> #Most of the data is at the low end, forming a peak on the left, and a few high values stretch the graph out to the right.
>
> #Q4
> breaks <- round(histogram$breaks)
> freq <- histogram$counts
> mids <- histogram$mids
> Classes <- c()
>
> for(i in 1:length(breaks)-1){
+   Classes[i] <- paste0("[", breaks[i], ",", breaks[i+1], ")")
+ }
>
> #get cumulative frequencies
> cum.freq <- cumsum(freq)
>
> new <- c()
>
> ## Using "for" loop to store cumulative frequencies in order to get the ogive
> for(i in 1:length(breaks)){
+   if(i==1){
+     new[i] = 0
+   } else {
+     new[i] = cum.freq[i-1]
+   }
+ }
> plot(breaks, new, type = 'l', main = "Cumulative Frequency Polygon for deliver times", xlab = "Shareholders", ylab = "Cumulative Frequency", ylim = c(0,max(cum.freq)))
>
```