Lab Sheet 05

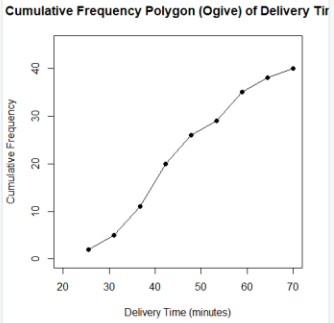
Exercise 2

IT24104076

```r
#Q2
breaks <- seq(20, 70, length.out = 10)

delivery_data <- Delivery_Times[, 1]


hist(delivery_data,
     breaks = breaks,
     right = FALSE,
     main = "Histogram of Delivery Times",
     xlab = "Delivery Time (minutes)",
     ylab = "Frequency",
     xlim = c(20, 70))



#Q3
cat("- Most delivery times happned in 40 minute")



#Q4
freq_table <- table(cut(delivery_data,
                        breaks = breaks,
                        right = FALSE))

cum_freq <- cumsum(freq_table)


plot(breaks[-1], cum_freq,
     type = "o",
     pch = 16,

     main = "Cumulative Frequency Polygon (Ogive) of Delivery Times",
     xlab = "Delivery Time (minutes)",
     ylab = "Cumulative Frequency",
     xlim = c(20, 70),
     ylim = c(0, max(cum_freq) + 5))
```

```
> plot(breaks[-1], cum_freq,
+      type = "o",
+      pch = 16,
+
+      main = "Cumulative Frequency Polygon (Ogive) of Delivery Times",
+      xlab = "Delivery Time (minutes)",
+      ylab = "Cumulative Frequency",
+      xlim = c(20, 70),
+      ylim = c(0, max(cum_freq) + 5))
>
```

Data	
data	32 obs. of 2 variables
Delivery_Times	40 obs. of 1 variable
values	
breaks	num [1:10] 20 25.6 31.1 36.7 42.2 ...
cum_freq	Named int [1:9] 2 5 11 20 26 29 35 38 40
delivery_data	int [1:40] 34 54 47 29 39 61 20 40 57 3…
freq_table	'table' int [1:9(1d)] 2 3 6 9 6 3 6 3 2



RStudio

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Go to file/function | Addins

it24104076.R* | IT24104076.R* | new (1).R | Untitled1* | Untitled2*

Source on Save

```
1  setwd("C:\\Users\\it24104076\\Desktop\\IT24104076")
2  getwd()
3
4  data <-read.table("Data.txt",header= TRUE,sep=",")
5  fix(data)
6
7  #Q1
8  Delivery_Times <- read.table('Exercise - Lab 05.txt', header = TRUE,sep = ",")
9
10 str(Delivery_Times)
11 head(Delivery_Times)
12
13
14 #Q2
15 breaks <- seq(20, 70, length.out = 10)
16
17 delivery_data <- Delivery_Times[, 1]
18
19
20 hist(delivery_data,
21      breaks = breaks,
22      right = FALSE,
23      main = "Histogram of Delivery Times",
24      xlab = "Delivery Time (minutes)",
25      ylab = "Frequency",
26      xlim = c(20, 70))
27
28
29
30 #Q3
31 cat("- Most delivery times happned in 40 minute")
32
33
34
35 #Q4
36 freq_table <- table(cut(delivery_data,
37                         breaks = breaks,
38                         right = FALSE))
39
40 cum_freq <- cumsum(freq_table)
41
```

8:1 (Top Level)

Console | Terminal | Background Jobs

R 4.2.2 · C:/Users/it24104076/Desktop/IT24104076/

```
'data.frame':   40 obs. of  1 variable:
 $ Delivery_Time_.minutes.: int  34 54 47 29 39 61 20 40 57 36 ...
> head(Delivery_Times)
  Delivery_Time_.minutes.
1                      34
2                      54
3                      47
4                      29
5                      39
6                      61
>
```

```r
setwd("C:\\Users\\IT24104076\\Desktop\\IT24104076")
getwd()

data <-read.table("Data.txt",header= TRUE,sep=",")
fix(data)

#Q1
Delivery_Times <- read.table('Exercise - Lab 05.txt', header = TRUE,sep = ",")

str(Delivery_Times)
head(Delivery_Times)


#Q2
breaks <- seq(20, 70, length.out = 10)

delivery_data <- Delivery_Times[, 1]


hist(delivery_data,
     breaks = breaks,
     right = FALSE,
     main = "Histogram of Delivery Times",
     xlab = "Delivery Time (minutes)",
     ylab = "Frequency",
     xlim = c(20, 70))


#Q3
cat("- Most delivery times happned in 40 minute")


#Q4
freq_table <- table(cut(delivery_data,
                        breaks = breaks,
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cum_freq <- cumsum(freq_table)
```
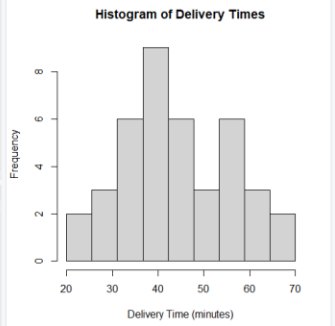

```
> delivery_data <- Delivery_Times[, 1]
>
>
> hist(delivery_data,
+      breaks = breaks,
+      right = FALSE,
+      main = "Histogram of Delivery Times",
+      xlab = "Delivery Time (minutes)",
+      ylab = "Frequency",
+      xlim = c(20, 70))
>
```

Environment	
Data	
data	32 obs. of 2 variables
Delivery_Times	40 obs. of 1 variable
histogram	List of 6
Values	
breaks	num [1:10] 20 25.6 31.1 36.7 42.2 ...
classes	NULL
cum_freq	Named int [1:9] 2 5 11 20 26 29 35 38 40
cum.freq	int [1:7] 4 13 17 23 26 28 32
delivery_data	int [1:40] 34 54 47 29 39 61 20 40 57 3..
freq	int [1:7] 4 9 4 6 3 2 4
freq_table	'table' int [1:9(1d)] 2 3 6 9 6 3 6 3 2
i	8L
mids	num [1:7] 140 160 180 200 220 240 260
new	num [1:8] 0 4 13 17 23 26 28 32