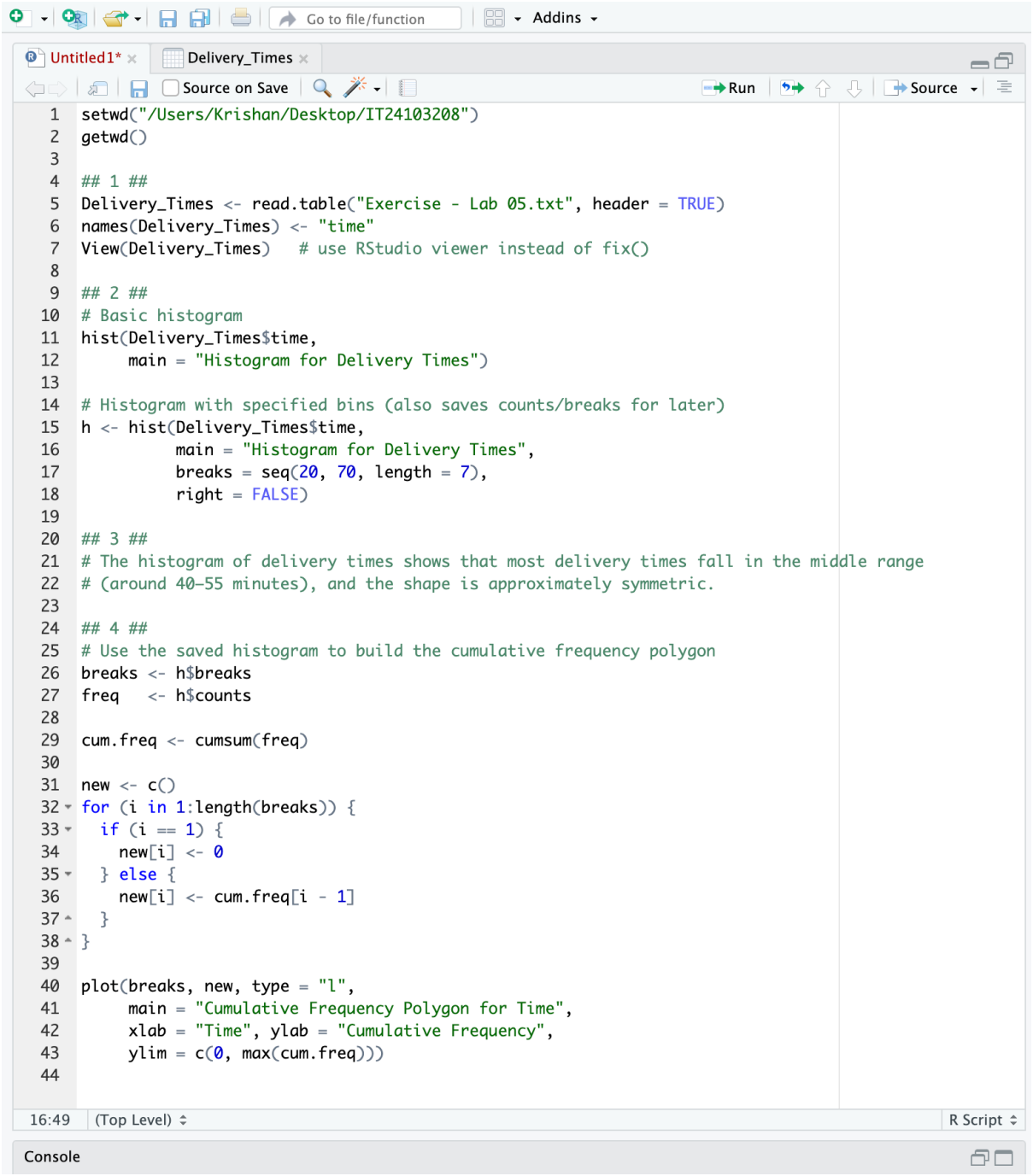
IT24103208

Sabaragamuwa S.K.S.I

Lab5



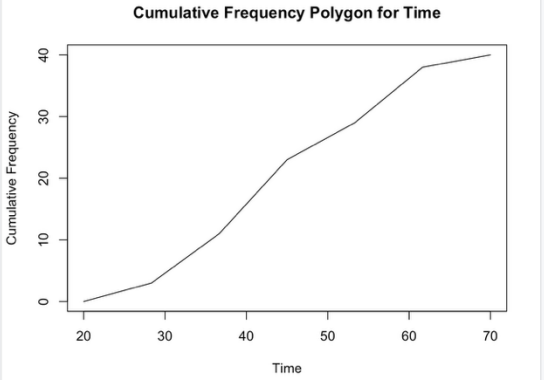
Delivery_Times

	time
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

Showing 1 to 32 of 40 entries, 1 total columns

Environment

Values	
a	5
b	3
breaks	num [1:7] 20 28.3 36.7 45 53.3 ...
cum.freq	int [1:6] 3 11 23 29 38 40
cumfreq	num [1:7] 0 3 11 23 29 38 40
freq	int [1:6] 3 8 12 6 9 2
gender	num [1:7] 0 0 0 1 0 1 0
Gender	Factor w/ 2 levels "female","male": 1 1 1 2 1 2 1
height	num [1:4] 56 73 62 59
i	7L
new	num [1:7] 0 3 11 23 29 38 40

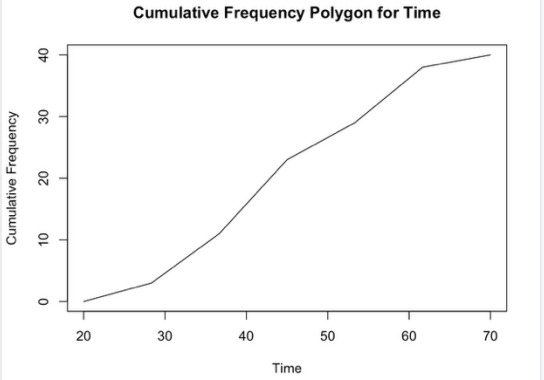


Delivery_Times

	time
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

Showing 16 to 40 of 40 entries, 1 total columns

```
+           main = "Histogram for Delivery Times",
+           breaks = seq(20, 70, length = 7),
+           right = FALSE)
>
> ## 3 ##
> # The histogram of delivery times shows that most delivery times fall in the middle range
> # (around 40-55 minutes), and the shape is approximately symmetric.
>
```



Console | Terminal | Background Jobs

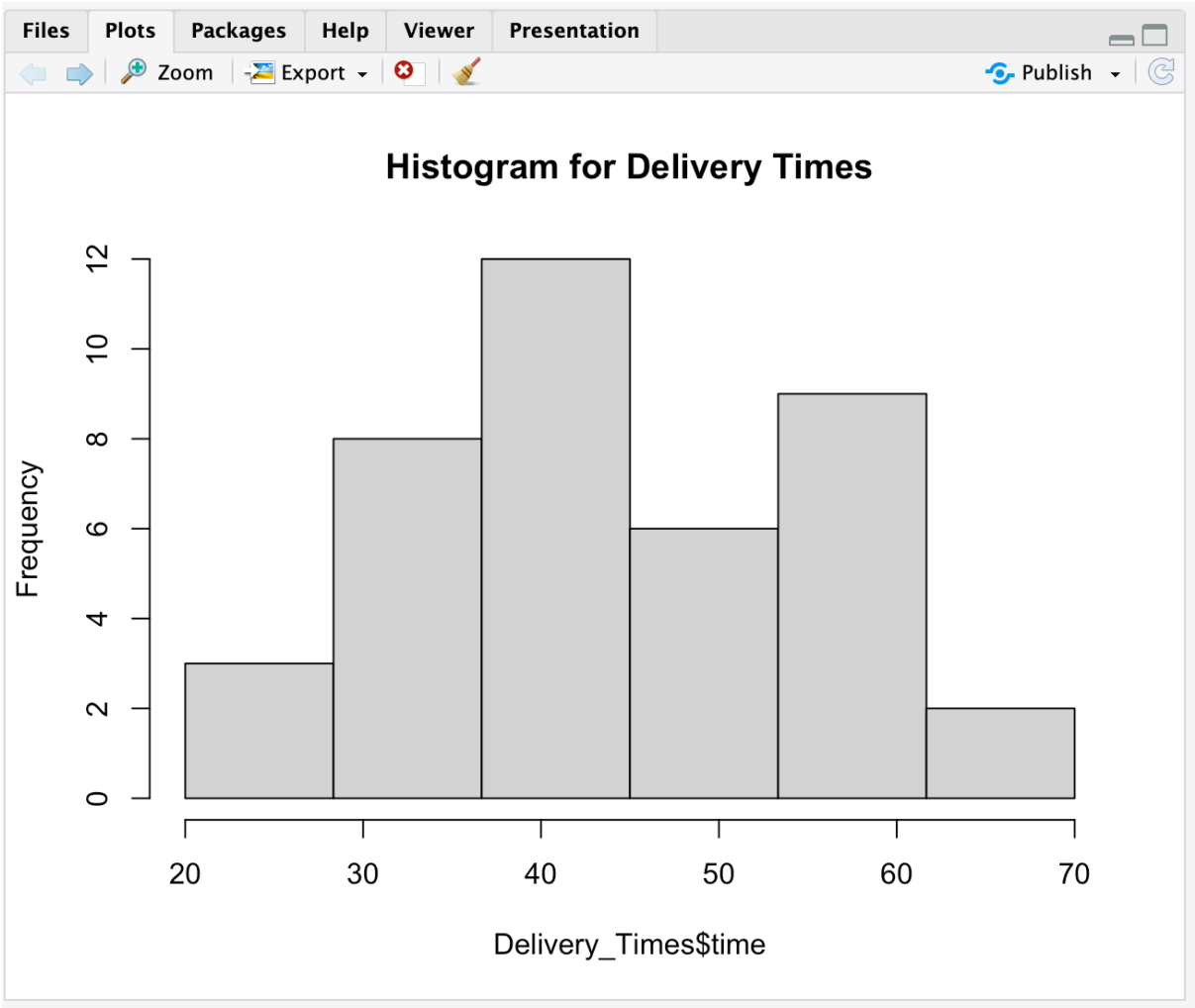
R 4.5.1 · ~/Desktop/IT24103208/

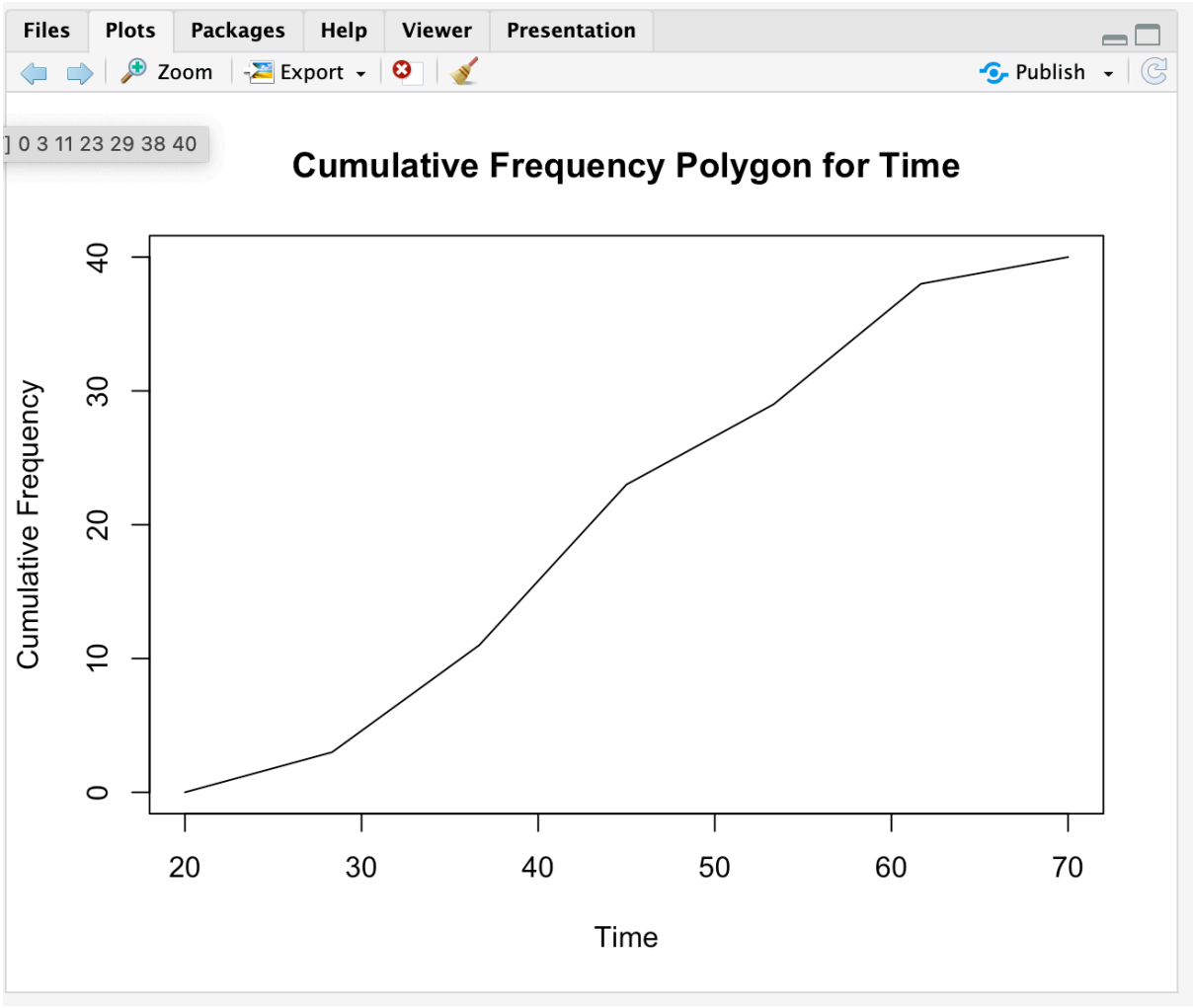
```
> setwd("/Users/Krishan/Desktop/IT24103208")
> getwd()
[1] "/Users/krishan/Desktop/IT24103208"
>
> ## 1 ##
> Delivery_Times <- read.table("Exercise - Lab 05.txt", header = TRUE)
> names(Delivery_Times) <- "time"
> View(Delivery_Times)   # use RStudio viewer instead of fix()
>
> ## 2 ##
> # Basic histogram
> hist(Delivery_Times$time,
+      main = "Histogram for Delivery Times")
>
> # Histogram with specified bins (also saves counts/breaks for later)
> h <- hist(Delivery_Times$time,
+           main = "Histogram for Delivery Times",
+           breaks = seq(20, 70, length = 7),
+           right = FALSE)
>
> ## 3 ##
> # The histogram of delivery times shows that most delivery times fall in the middle range
> # (around 40–55 minutes), and the shape is approximately symmetric.
>
> ## 4 ##
```

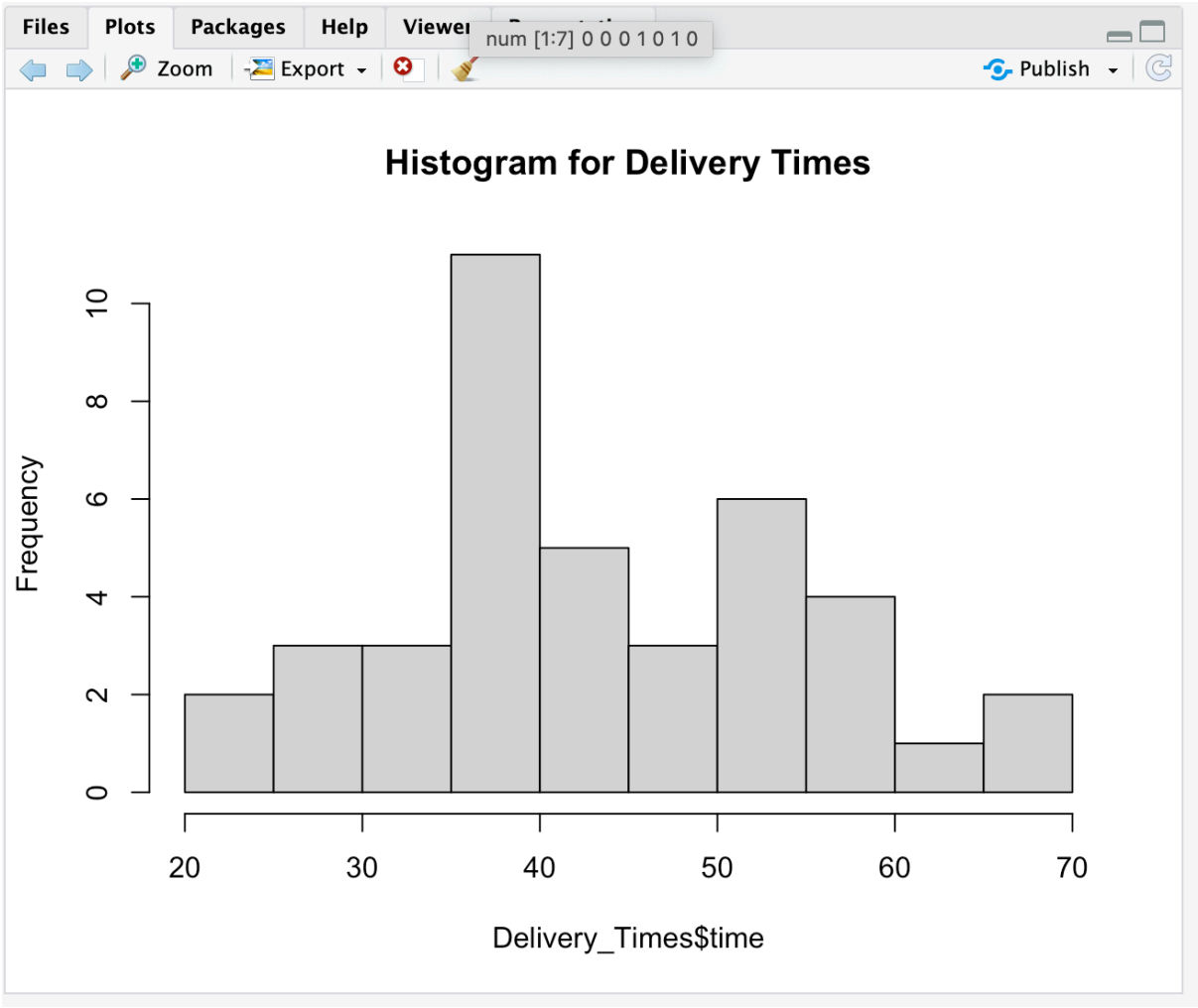
Console | Terminal | Background Jobs

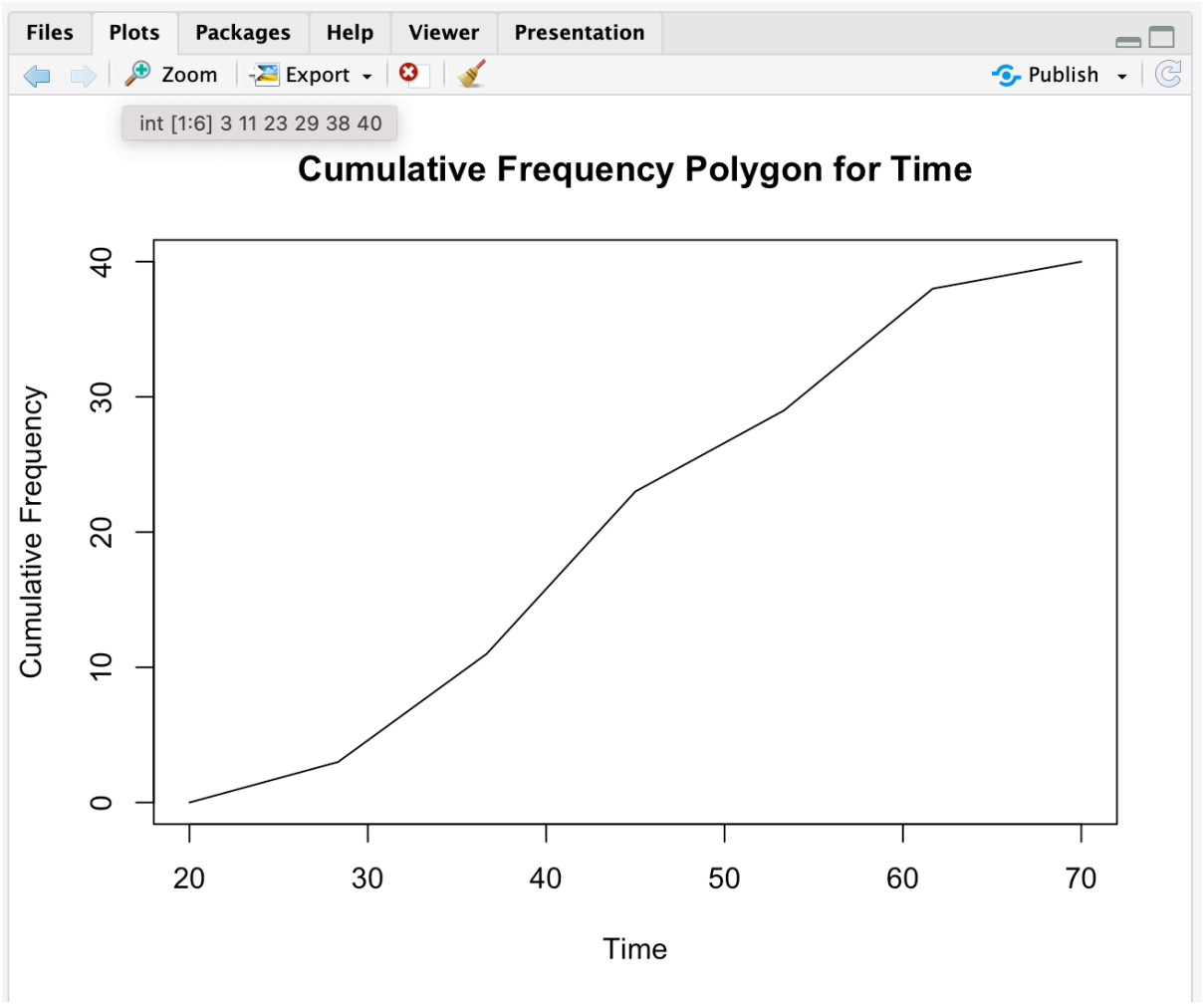
R 4.5.1 · ~/Desktop/IT24103208/

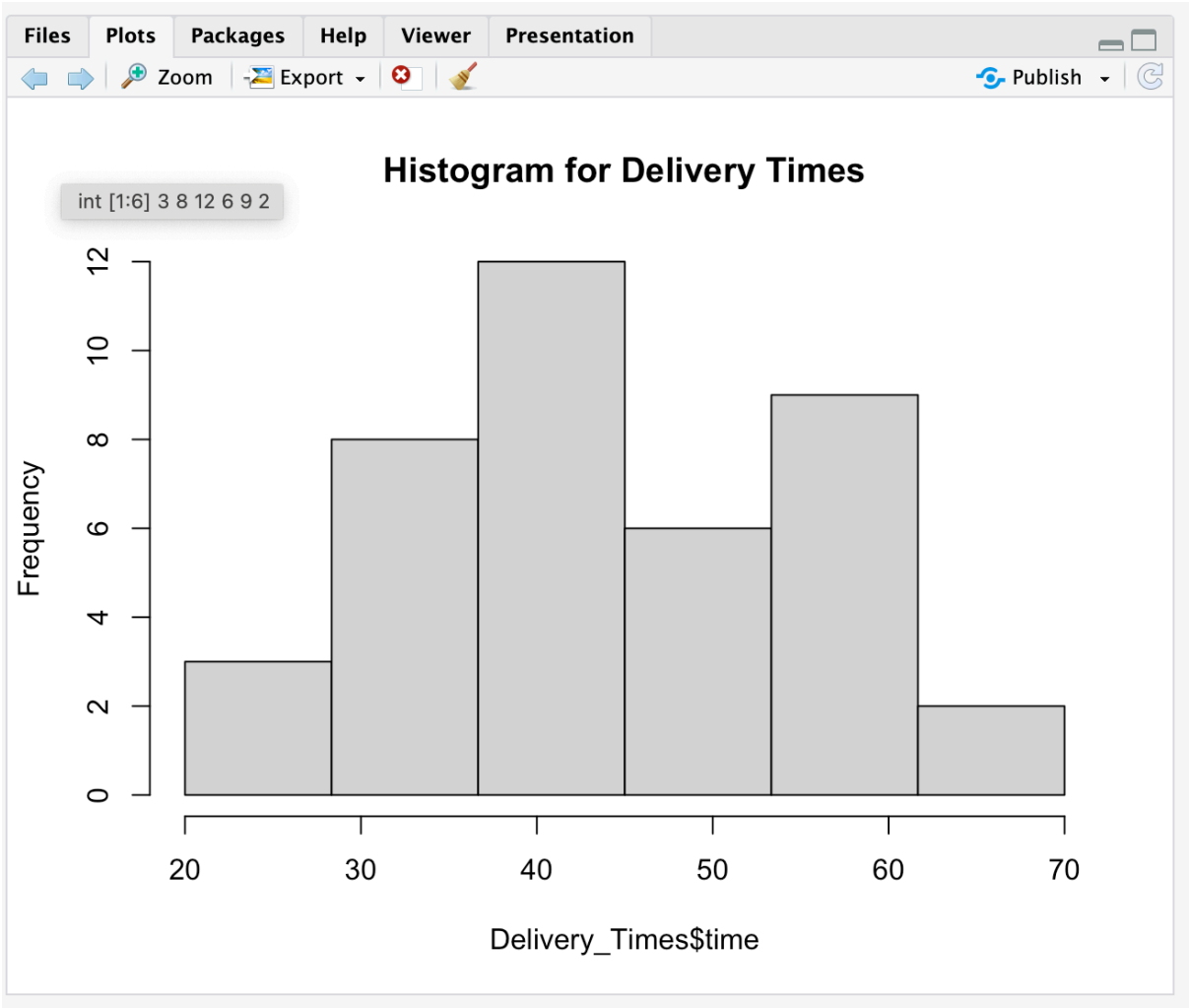
```
> ## 3 ##
> # The histogram of delivery times shows that most delivery times fall in the middle range
> # (around 40–55 minutes), and the shape is approximately symmetric.
>
> ## 4 ##
> # Use the saved histogram to build the cumulative frequency polygon
> breaks <- h$breaks
> freq   <- h$counts
>
> cum.freq <- cumsum(freq)
>
> new <- c()
> 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 Time",
+      xlab = "Time", ylab = "Cumulative Frequency",
+      ylim = c(0, max(cum.freq)))
>
```


Files
Plots
Packages
Help
Viewer
Presentation
Zoom
Export
Publish
Histogram for Delivery Times
Frequency
0
2
4
6
8
10
12
20
30
40
50
60
70
Delivery_Times$time


Files
Plots
Packages
Help
Viewer
Presentation
Zoom
Export
Publish
] 0 3 11 23 29 38 40
Cumulative Frequency Polygon for Time
Cumulative Frequency
0
10
20
30
40
20
30
40
50
60
70
Time


Files
Plots
Packages
Help
Viewer
num [1:7] 0 0 0 1 0 1 0
Zoom
Export
Publish
Histogram for Delivery Times
Frequency
0
2
4
6
8
10
20
30
40
50
60
70
Delivery_Times$time


Files
Plots
Packages
Help
Viewer
Presentation
Zoom
Export
Publish
int [1:6] 3 11 23 29 38 40
Cumulative Frequency Polygon for Time
Cumulative Frequency
0
10
20
30
40
20
30
40
50
60
70
Time


Files
Plots
Packages
Help
Viewer
Presentation
Zoom
Export
Publish
Histogram for Delivery Times
int [1:6] 3 8 12 6 9 2
Frequency
0
2
4
6
8
10
12
20
30
40
50
60
70
Delivery_Times$time