

IT24102779

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Probability and Statistics

Lab 05

1.

```
setwd("C:\\Users\\damse\\Desktop\\IT24102779\\Lab 05-20250828")
#Exercise
#1
DeliveryTimes <- read.table("Exercise - Lab 05.txt", header = TRUE)
colnames(DeliveryTimes) <- c("DeliveryTime")
print(DeliveryTimes)
times <- DeliveryTimes$DeliveryTime
breaks_seq <- seq(20, 70, length.out = 10)

> DeliveryTimes <- read.table("Exercise - Lab 05.txt", header = TRUE)
> colnames(DeliveryTimes) <- c("DeliveryTime")
> print(DeliveryTimes)
  DeliveryTime
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
```

2.

```
#2
hist(times,
      breaks = breaks_seq,
      right = FALSE,      # right-open intervals
      main = "Histogram of Delivery Times",
      xlab = "Delivery Time (minutes)",
      col = "lightblue",
      border = "black")

> #2
> hist(times,
+       breaks = breaks_seq,
+       right = FALSE,      # right-open intervals
+       main = "Histogram of Delivery Times",
+       xlab = "Delivery Time (minutes)",
+       col = "lightblue",
+       border = "black")
> |
```



3.

```
#3  
#It is look like a Symmetric Histogram.
```

4.

```
#4  
hist_data <- hist(times,  
                  breaks = breaks_seq,  
                  right = FALSE,  
                  plot = FALSE,  
                  include.lowest = TRUE)  
cum_freq <- cumsum(hist_data$counts)  
boundaries <- hist_data$breaks[-1]  
  
> hist_data <- hist(times,  
+                   breaks = breaks_seq,  
+                   right = FALSE,  
+                   plot = FALSE,  
+                   include.lowest = TRUE)  
> |
```