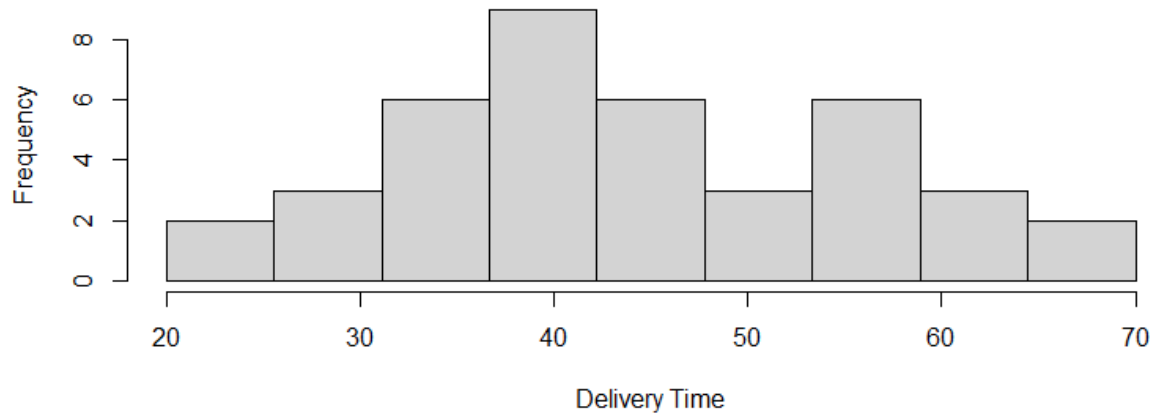


Probability and Statistics

Lab 05

```
1 setwd("C:\\users\\IT24103474\\Desktop\\IT24103474")
2 getwd()
3 Delivery_Times <- read.table("Exercise - Lab 05 (1).txt", header = TRUE)
4 head(Delivery_Times)
5 x <- Delivery_Times[[1]]
6 breaks <- seq(20,70,length.out = 10)
7 hist(x, breaks = breaks, right = FALSE, main = "Histogram of Delivery Times (9 right-open classes)",
8     xlab = "Delivery Time", ylab = "Frequency")
9 #if the bars stretch further to the right, it's positively (right) skewed
10 #if they stretch to the left, it's negatively (left) skewed
11 #if it looks roughly bell-shaped and balanced, it's approximately symmetric/normal
12 h <- hist(x, breaks = breaks, right = FALSE, plot = FALSE)
13 cum_freq <- c(0, cumsum(h$counts))
14 upper_bounds <- breaks
15 plot(upper_bounds, cum_freq, type = "o", xlab = "Delivery Time", ylab = "Cumulative Frequency", main = "ogive (Cumulative Frequency Polygon)")
16 grid()
```

Histogram of Delivery Times (9 right-open classes)



Ogive (Cumulative Frequency Polygon)

