Exercise

1. Import the dataset ('Exercise – Lab 05.txt') into R and store it in a data frame called "Delivery Times".

```
> setwd("C:\\Users\\it24201016\\Desktop\\IT24201016_Lab_5")
> getwd()
[1] "C:/Users/it24201016/Desktop/IT24201016_Lab_5"
```

2. Draw a histogram for deliver times using nine class intervals where the lower limit is 20 and upper limit is 70. Use right open intervals.

```
> Delivery_Times <- read.table("Exercise - Lab 05.txt", header = TRUE)
>
> Delivery_Times$Delivery_Time_.minutes. <- as.numeric(Delivery_Times$Deliv
ery_Time_.minutes.)
>
> hist(Delivery_Times$Delivery_Time_.minutes.,
+       breaks = seq(20, 70, by = 5),
+       right = TRUE,
+       col = "blue",
+       main = "Histogram of Delivery Times",
+       xlab = "Delivery Time",
+       ylab = "Frequency")
```


Histogram of Delivery Times
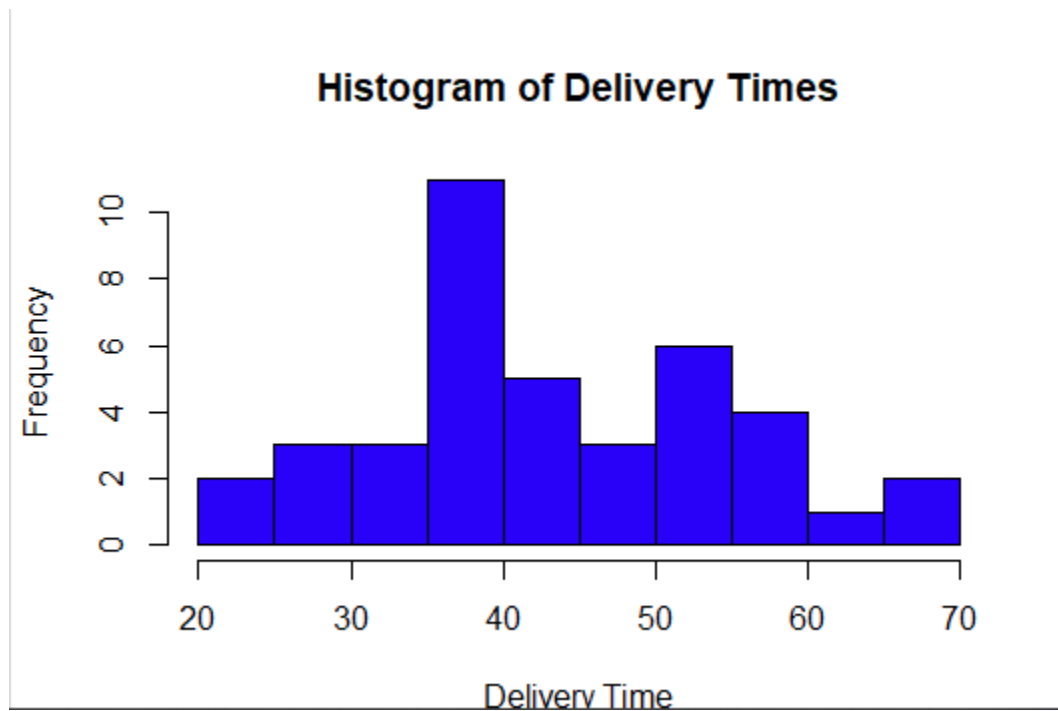
3. Comment on the shape of the distribution.

- The distribution of delivery times appears to be unimodal with a peak around 40 minutes, indicating that most deliveries occur near this time.

4. Draw a cumulative frequency polygon (ogive) for the data in a separate plot.

```
> cf <- cumsum(table(cut(Delivery_Times$Delivery_Time_.minutes.,breaks = se
q(20, 70, by = 5), right = TRUE)))
> plot(seq(22.5, 67.5, by = 5), cf, type = "o", col = "red",
+       xlab = "Delivery Time", ylab = "Cumulative Frequency",
+       main = "Cumulative Frequency Polygon (Ogive)")
```


Cumulative Frequency Polygon (Ogive)