

Lab sheet 05

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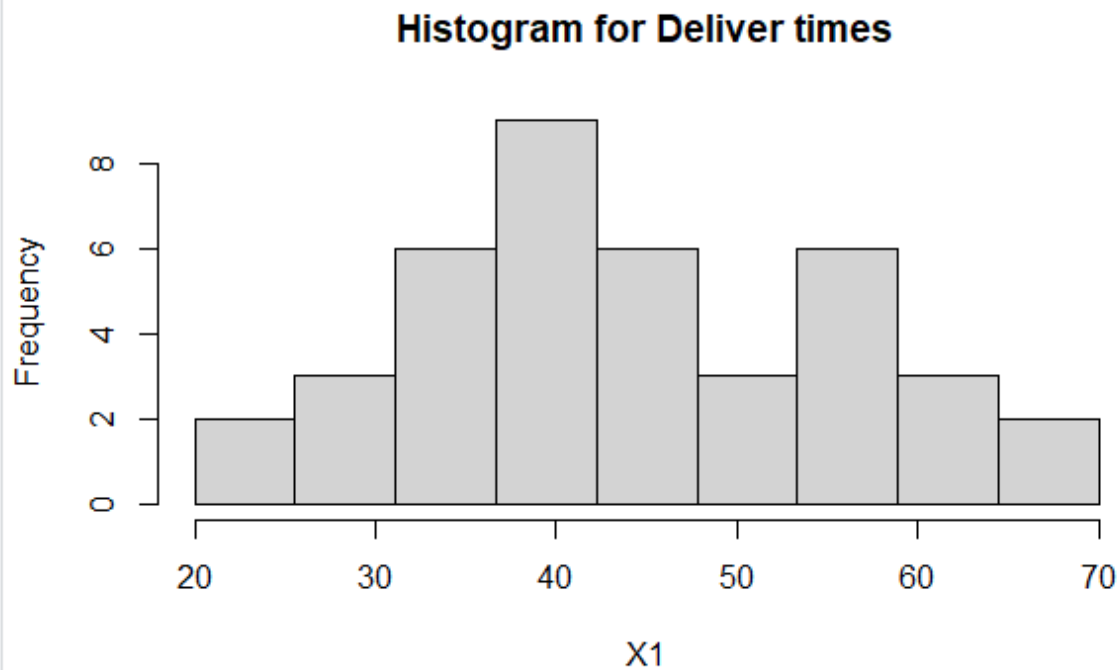
01).

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

```
> #Q2  
> names(Delivery_Times)<-c("X1")
```

02). > attach(Delivery_Times)

```
> histogram <- hist(  
+   X1,  
+   main = "Histogram for Deliver times",  
+   breaks = seq(20, 70, length=10),  
+   right = FALSE)
```



03).

```
> #Q3
> #The distribution is approximately symmetric and bell-shaped, resembling a normal distribution
>
```

04).

```
> #Q4
> breaks <- round(histogram$breaks)
> breaks
[1] 20 26 31 37 42 48 53 59 64 70
> freq <- histogram$counts
> freq
[1] 2 3 6 9 6 3 6 3 2
> mids <- histogram$mids
> mids
[1] 22.77778 28.33333 33.88889 39.44444 45.00000 50.55556 56.11111 61.66667 67.22222
>
> 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 deliver times",
+       xlab = "Shareholders",
+       ylab = "Cumulative Frequency",
+       ylim = c(0,max(cum.freq)))
>
> cbind(upper = breaks, CumFreq = new)
      upper CumFreq
[1,]    20        0
[2,]    26         2
[3,]    31         5
[4,]    37        11
[5,]    42        20
[6,]    48        26
[7,]    53        29
[8,]    59        35
[9,]    64        38
[10,]   70        40
> |
```

Cumulative Frequency Polygon for deliver times

