Sri Lanka Institute of Information Technology

Lab Submission
Lab sheet 05

IT24101037

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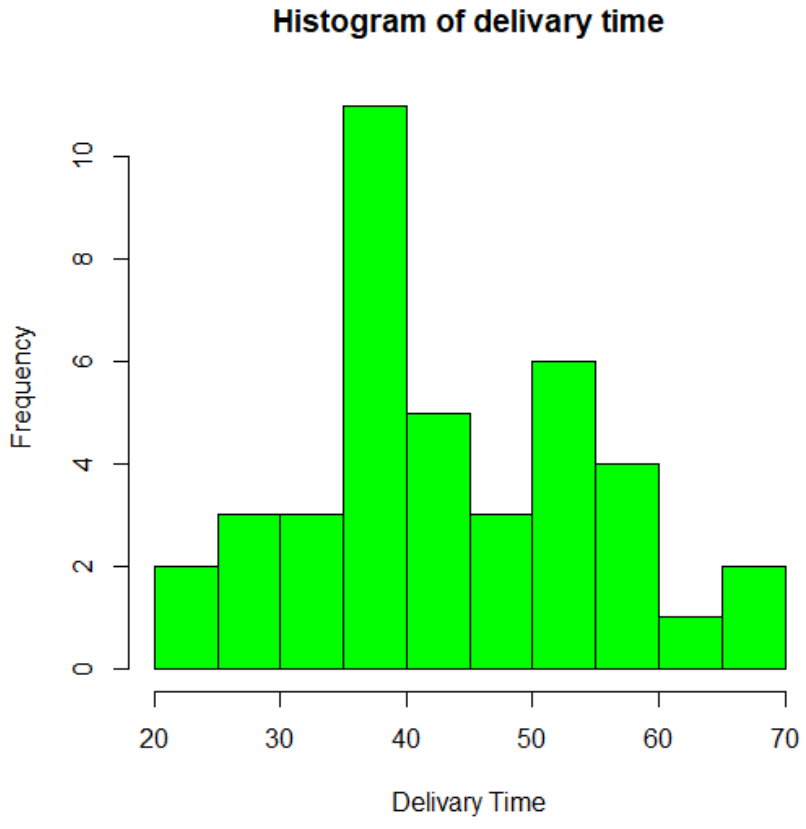
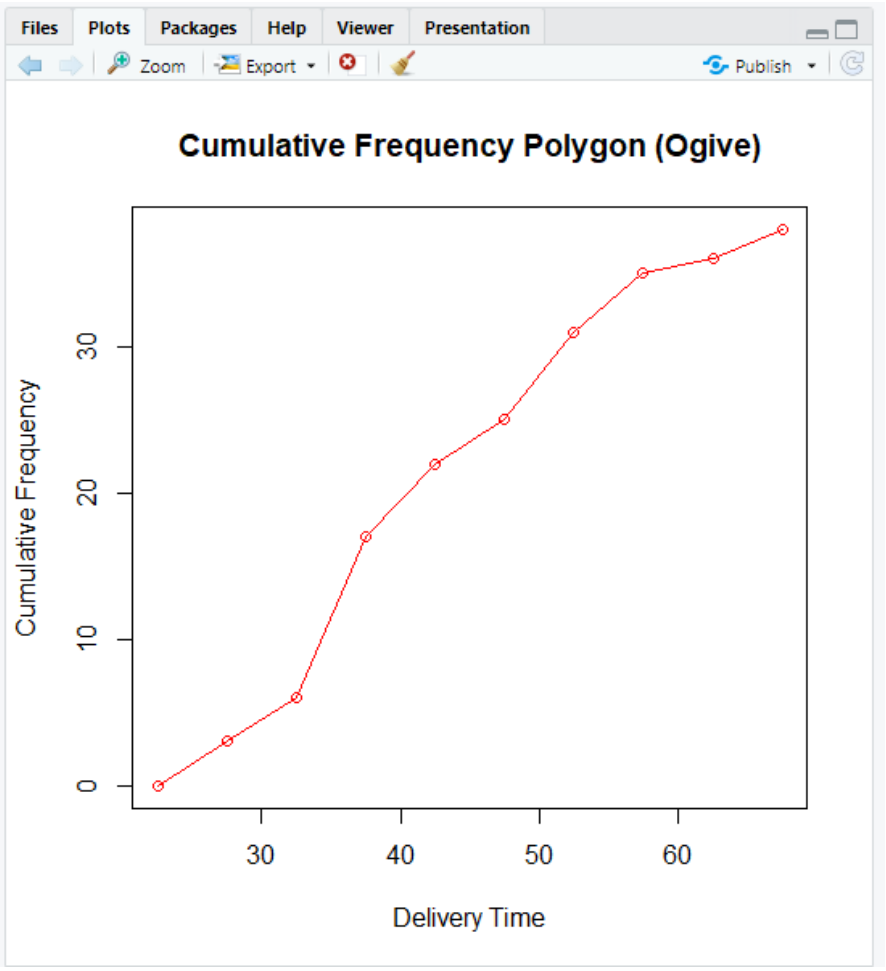
Probability and Statistics| IT2120

B.Sc. (Hons) in Information Technology

Exercise

```r
setwd("C:\\Users\\it24101037\\Desktop\\IT24101037")
getwd()

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

attach(Delivery_Times)

#Q2
hist(Delivery_Times$Delivery_Time_.minutes., breaks = seq(20, 70, by=5),
     right=TRUE,
     col='green',
     main="Histogram of delivary time",
     xlab="Delivary Time",
     ylab="Frequency")
#3
#the histogram shows a roughly bell-shaped distribution, with a peak
#around 30-50 minutes. The distribution has fewer deliveries below 30 minutes
#and above 60 minutes.

#4
cf <- cumsum(table(cut(Delivery_Times$Delivery_Time_.minutes., breaks = seq(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)")
```






```
Console  Terminal  Background Jobs
R 4.2.2 · C:/Users/it24101037/Desktop/IT24101037/
> setwd("C:\\Users\\it24101037\\Desktop\\IT24101037")
> getwd()
[1] "C:/Users/it24101037/Desktop/IT24101037"
> #Q1
> Delivery_Times<-read.table("Exercise - Lab 05.txt", header=TRUE)
> fix(Delivery_Times)
> #Q2
> hist(Delivery_Times$Delivery_Time_.minutes., breaks = seq(20, 70, by=5),
+      right=TRUE,
+      col='green',
+      main="Histogram of delivary time",
+      xlab="Delivary Time",
+      ylab="Frequency")
> #4
> cf <- cumsum(table(cut(Delivery_Times$Delivery_Time_.minutes., breaks = seq(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)")
>
```