

# Sri Lanka Institute of Information Technology



Lab Submission  
Lab sheet No 05

**It24102242**

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**Probability and Statistics | IT2120**

B.Sc. (Hons) in Information Technology

```

setwd("C:\\Users\\it24102242\\Downloads\\Lab 05-20250829")
#Q1
Delivery_Times<-read.table("Exercise - Lab 05.txt",header=TRUE)
print(Delivery_Times)

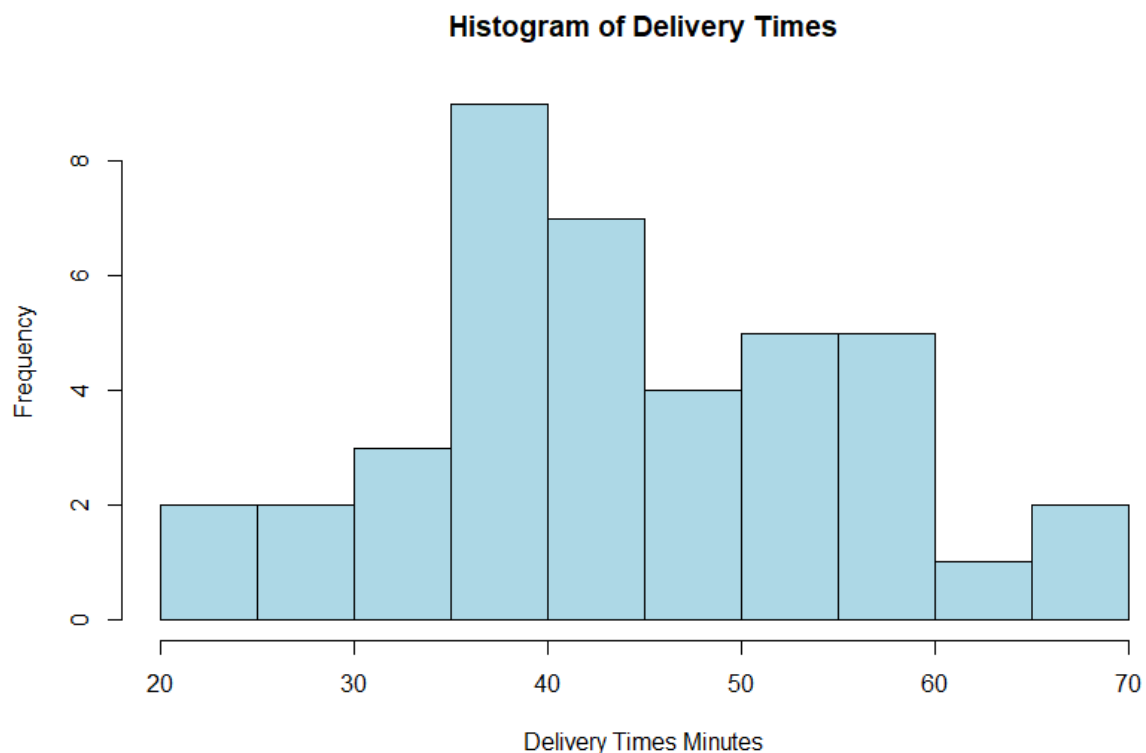
hist(Delivery_Times$Delivery,
     breaks = seq(20, 70, by = 5),
     right = FALSE,
     main = "Histogram of Delivery Times",
     xlab = "Delivery Times Minutes",
     ylab = "Frequency",
     col = "lightblue",
     border = "black")

hist_data <- hist(Delivery_Times$Delivery,
                  breaks = seq(20, 70, by = 5),
                  right = FALSE,
                  plot = FALSE)

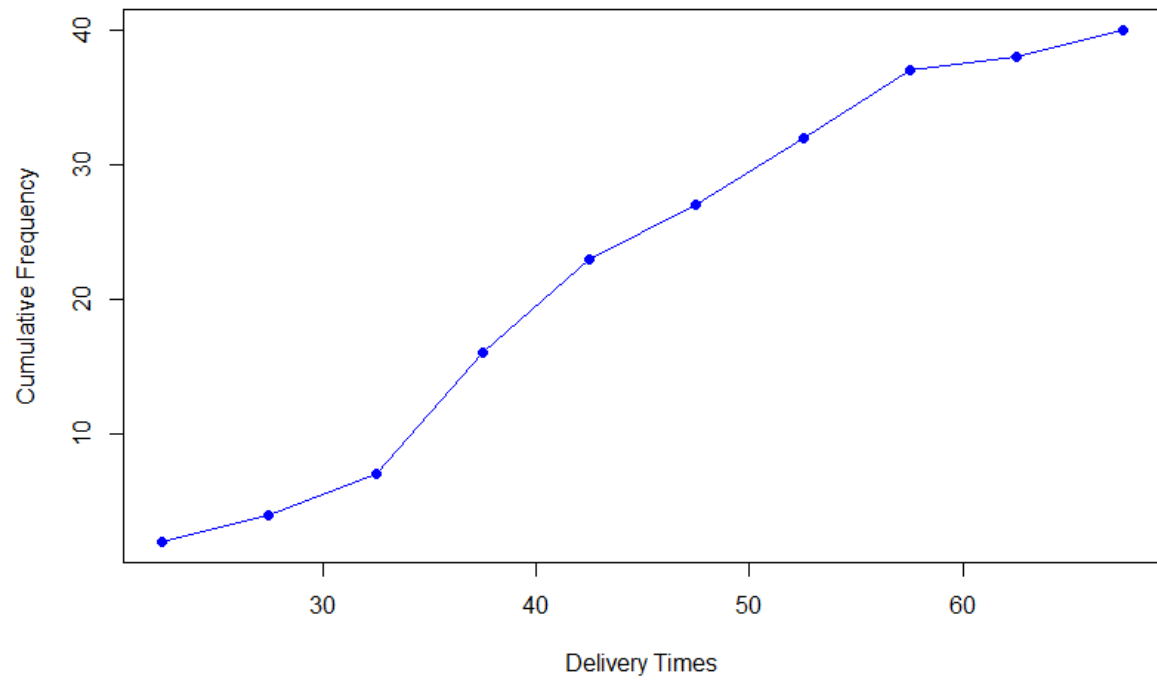
cumulative_freq <- cumsum(hist_data$counts)

plot(hist_data$mids, cumulative_freq,
     type = "o",
     main = "Cumulative Frequency Polygon (ogive)",
     xlab = "Delivery Times",
     ylab = "Cumulative Frequency",
     pch = 16,
     col = "blue")

```



**Cumulative Frequency Polygon (Ogive)**



```
> setwd("C:\\Users\\it24102242\\Downloads\\Lab 05-20250829")
> #Q1
> Delivery_Times<-read.table("Exercise - Lab 05.txt",header=TRUE)
> print(Delivery_Times)
  Delivery_Time_.minutes.
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
14               38
15               40
16               40
17               67
18               66
19               55
20               48
21               52
22               59
23               35
24               56
25               32
26               38
27               54
28               30
29               43
30               36
31               42
32               20
33               27
34               38
35               54
36               43
37               45
38               51
39               36
40               47
```

```

> hist(Delivery_Times$Delivery,
+       breaks = seq(20, 70, by = 5),
+       right = FALSE,
+       main = "Histogram of Delivery Times",
+       xlab = "Delivery Times Minutes",
+       ylab = "Frequency",
+       col = "lightblue",
+       border = "black")
> hist_data <- hist(Delivery_Times$Delivery,
+                   breaks = seq(20, 70, by = 5),
+                   right = FALSE,
+                   plot = FALSE)
> cumulative_freq <- cumsum(hist_data$counts)
> plot(hist_data$mids, cumulative_freq,
+       type = "o",
+       main = "Cumulative Frequency Polygon (Ogive)",
+       xlab = "Delivery Times",
+       ylab = "Cumulative Frequency",
+       pch = 16,
+       col = "blue")
>
>
>
>
> hist(Delivery_Times$Delivery,
+       breaks = seq(20, 70, by = 5),
+       right = FALSE,
+       main = "Histogram of Delivery Times",
+       xlab = "Delivery Times Minutes",
+       ylab = "Frequency",
+       col = "lightblue",
+       border = "black")
> cumulative_freq <- cumsum(hist_data$counts)
>
>
> plot(hist_data$mids, cumulative_freq,
+       type = "o",
+       main = "Cumulative Frequency Polygon (Ogive)",
+       xlab = "Delivery Times",
+       ylab = "Cumulative Frequency",
+       pch = 16,
+       col = "blue")
> |

```