IT2120 - Probability and Statistics – Lab – 05

IT24100052-Ahamed MSA

1.

```
# Setting the working directory
setwd("C:\Users\HEALTHY MACHINES\Desktop\IT24100052")
```

2.

```
# breaks for the histogram
breaks <- seq(20, 70, by = 5)
# Create the histogram
hist(Delivery_Times$Delivery_Time_, breaks = breaks,
     right = TRUE,
     main = "Histogram of Delivery Times",
     xlab = "Delivery Time")
```

3.

4.

```
# calculate the frequency table
freq_table <- hist(Delivery_Times$Delivery_Time_, breaks = breaks, right = TRUE, plot = FALSE)

# get the cumulative frequency
cum_freq <- cumsum(freq_table$counts)

# create the cumulative frequency polygon
plot(freq_table$mids, cum_freq, type = "o",
     main = "Cumulative Frequency Polygon",
     xlab = "Delivery Time",
     ylab = "Cumulative Frequency")
```

```
# Boxplot for Sales
boxplot(branch_data$Sales_X1,
        outline = TRUE,
        outpch=8,
        horizontal=TRUE,
        main = "sales distribution")
```