Sri Lanka Institute of Information Technology

Lab Sheet 4

IT24101836

Sajeevan N

B.Sc. (Hons) in Information Technology

Exercise

```r
#Exercise
#Q1
setwd("C://Users//it24101836//Desktop//IT24101836")
branch_data <- read.table("Exercise.txt", header = TRUE, sep = ",")
#Q3
boxplot(branch_data$Sales,
        main = "Boxplot of Sales",
        ylab = "Sales",
        col = "lightblue",
        horizontal = TRUE)
#Q4
summary(branch_data$Advertising)
fivenum(branch_data$Advertising)
IQR(branch_data$Advertising)

#Q5
# Function to find outliers in a numeric vector
find_outliers <- function(x) {
  Q1 <- quantile(x, 0.25)
  Q3 <- quantile(x, 0.75)
  IQR_val <- IQR(x)

  lower_bound <- Q1 - 1.5 * IQR_val
  upper_bound <- Q3 + 1.5 * IQR_val

  outliers <- x[x < lower_bound | x > upper_bound]

  return(list(
    Q1 = Q1,
    Q3 = Q3,
    IQR = IQR_val,
    Lower_Bound = lower_bound,
    Upper_Bound = upper_bound,
    Outliers = outliers
  ))
}
```