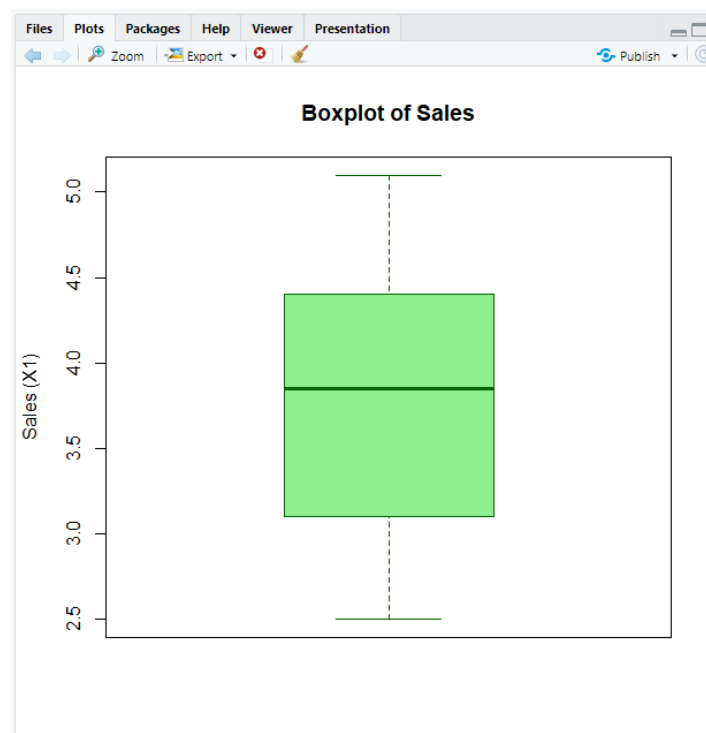


```
1 #1.
2 setwd("C:/Users/IT24100416/Desktop/IT24100416")
3 branch_data <- read.table("Exercise.txt", header = TRUE, sep = ",")
4 head(branch_data)
5
6 #2
7 str(branch_data)
8
9 #3
10 boxplot(branch_data$Sales_X1, main = "Boxplot of Sales",
11         ylab = "Sales (X1)", col = "lightgreen", border = "darkgreen")
12
13 #4
14 summary(branch_data$Advertising_X2)
15 fivenum(branch_data$Advertising_X2)
16 IQR(branch_data$Advertising_X2)
17
18 #5
19 find_outliers <- function(x) {
20   Q1 <- quantile(x, 0.25)
21   Q3 <- quantile(x, 0.75)
22   IQR_val <- IQR(x)
23   lower <- Q1 - 1.5 * IQR_val
24   upper <- Q3 + 1.5 * IQR_val
25   outliers <- x[x < lower | x > upper]
26   return(outliers)
27 }
28
29 find_outliers(branch_data$Years_X3)
30
```



Console Terminal × Background Jobs ×

R 4.4.0 · C:/Users/IT24100416/Desktop/IT24100416/ ↗

```
> #1.
> setwd("C:/Users/IT24100416/Desktop/IT24100416")
> branch_data <- read.table("Exercise.txt", header = TRUE, sep = ",")
> head(branch_data)
  Branch Sales_X1 Advertising_X2 Years_X3
1      1      3.4           120        4
2      2      4.1           150        7
3      3      2.8            90        3
4      4      5.0           200       10
5      5      3.7           110        5
6      6      4.5           175        6
> #2
> str(branch_data)
'data.frame':  30 obs. of  4 variables:
 $ Branch      : int  1 2 3 4 5 6 7 8 9 10 ...
 $ Sales_X1    : num  3.4 4.1 2.8 5 3.7 4.5 3 4.9 3.2 2.5 ...
 $ Advertising_X2: int  120 150 90 200 110 175 95 185 105 80 ...
 $ Years_X3    : int   4 7 3 10 5 6 2 9 4 1 ...
> #3
> boxplot(branch_data$Sales_X1, main = "Boxplot of Sales",
+         ylab = "Sales (X1)", col = "lightgreen", border = "darkgreen")
> #4
> summary(branch_data$Advertising_X2)
   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
 80.0   101.2   132.5   134.8   158.8   210.0
> fivenum(branch_data$Advertising_X2)
[1] 80.0 100.0 132.5 160.0 210.0
> IQR(branch_data$Advertising_X2)
[1] 57.5
> #5
> find_outliers <- function(x) {
+   Q1 <- quantile(x, 0.25)
+   Q3 <- quantile(x, 0.75)
+   IQR_val <- IQR(x)
+   lower <- Q1 - 1.5 * IQR_val
+   upper <- Q3 + 1.5 * IQR_val
+   outliers <- x[x < lower | x > upper]
+   return(outliers)
+ }
> find_outliers(branch_data$Years_X3)
integer(0)
> |
```