

```

setwd("C:\\Users\\it24100719\\Downloads\\IT24100719_PS_Lab_04")
branch_data <- read.table("Exercise.txt",header = TRUE ,sep = ",")
fix(branch_data)
attach(branch_data)

boxplot(Sales_X1,main ="Box plot for Sales",outline =TRUE,outpch=8,horizontal=FALSE)

Summary(Advertising_X2)
quantile(Advertising_X2)
IQR(Advertising_X2)

get.Function <- function(input) {

  q1 <- quantile(input)[2]
  q2 <- quantile(input)[4]
  iqr <- IQR(input)

  ub <- q2 + 1.5*iqr
  lb <- q1 + 1.5*iqr

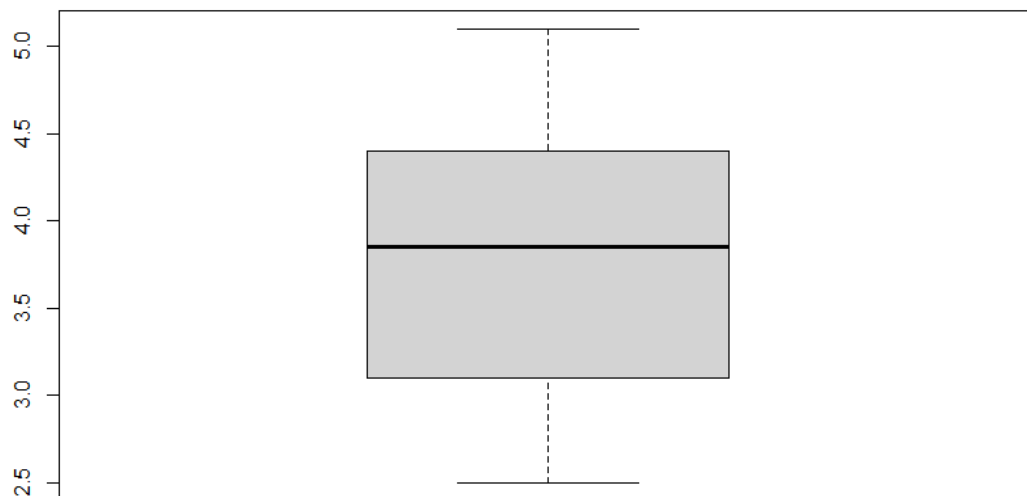
  print(paste("Upper Bound =", ub))
  print(paste("Lower Bound =",lb))
  print(paste("Outliers:", paste(sort(input[input < lb | input > ub]),collapse = ","))))
}

get.Function(Years_X3)

```

Data Editor				
File Edit Help				
	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	200	10
5	5	3.7	110	5
6	6	4.5	175	6
7	7	3	95	2
8	8	4.9	185	9
9	9	3.2	105	4
10	10	2.5	80	1
11	11	3.9	130	5
12	12	4.2	140	7
13	13	2.7	100	3
14	14	3.6	125	4
15	15	4.8	190	8
16	16	3.3	115	5
17	17	4	135	6
18	18	5.1	210	12
19	19	3.8	145	6

Box plot for Sales



```
> summary(Advertising_X2)
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
  80.0   101.2   132.5   134.8   158.8   210.0

> quantile(Advertising_X2)
  0%    25%    50%    75%   100%
 80.00 101.25 132.50 158.75 210.00

> IQR(Advertising_X2)
[1] 57.5

> get.Function(Years_X3)
[1] "Upper Bound = 14.5"
[1] "Lower Bound = 10"
[1] "Outliers: 1,1,2,2,2,3,3,3,4,4,4,5,5,5,5,6,6,6,6,7,7,7,8,8,9,9"
```