

```
1 setwd( C:\\Users\\1124104092\\Desktop\\1124104092 )
```

```
2  
3 ##Question 01 :-
```

```
4 branch_data <- read.table("Exercise.txt", header = TRUE, sep = ",")
```

```
5  
6 fix(branch_data)
```

```
7  
8  
9 Data Editor
```

```
0 File Edit Help
```

	Branch	Sales_X1	Advertising_X2	Years_X3	var5	var6	var7
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			

```
> ##Question 02 :-
```

```
>
```

```
> str(branch_data)
```

```
'data.frame': 30 obs. of 4 variables:
```

```
$ Branch : num 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: num 120 150 90 200 110 175 95 185 105 80 ...
```

```
$ Years_X3 : num 4 7 3 10 5 6 2 9 4 1 ...
```

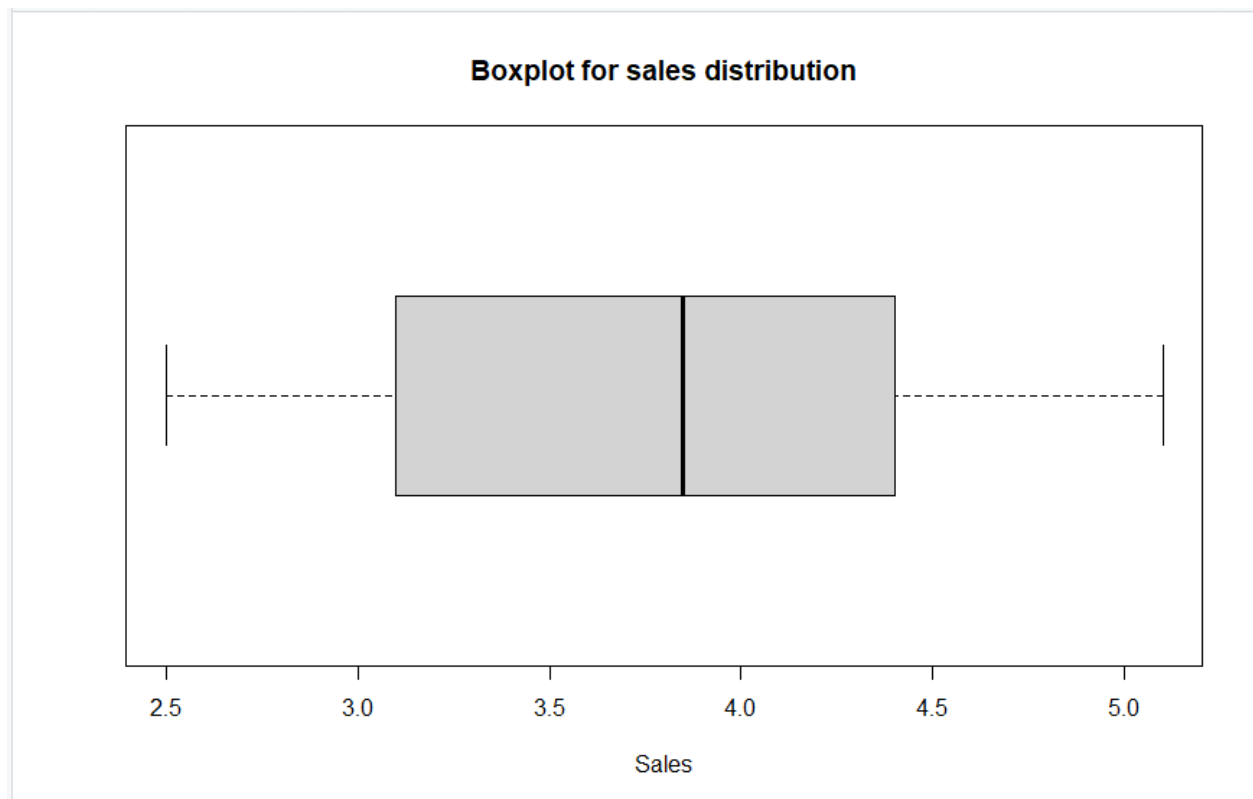
```
>
```

```
> sapply(branch_data, class)
```

```
Branch Sales_X1 Advertising_X2 Years_X3  
"numeric" "numeric" "numeric" "numeric"
```

```
> |
```

```
> ##Question 03 :-  
>  
> boxplot(Sales_X1,main="Boxplot for sales distribution",xlab="Sales",outline=TRUE,outpch=8,horizontal=TRUE)  
> |
```



```
> ##Question 04 :-
>
> quantile(Advertising_X2)
      0%      25%      50%      75%     100%
80.00 101.25 132.50 158.75 210.00
>
> IQR(Advertising_X2)
[1] 57.5
```

```
> ##Question 05s :-
>
> find_outliers <- function(x) {
+   Q1 <- quantile(x, 0.25)
+   Q3 <- quantile(x, 0.75)
+   IQR <- Q3 - Q1
+
+   lower_bound <- Q1 - 1.5 * IQR
+   upper_bound <- Q3 + 1.5 * IQR
+
+   outliers <- x[x < lower_bound | x > upper_bound]
+
+   return(outliers)
+ }
>
> find_outliers(Years_X3)
numeric(0)
```