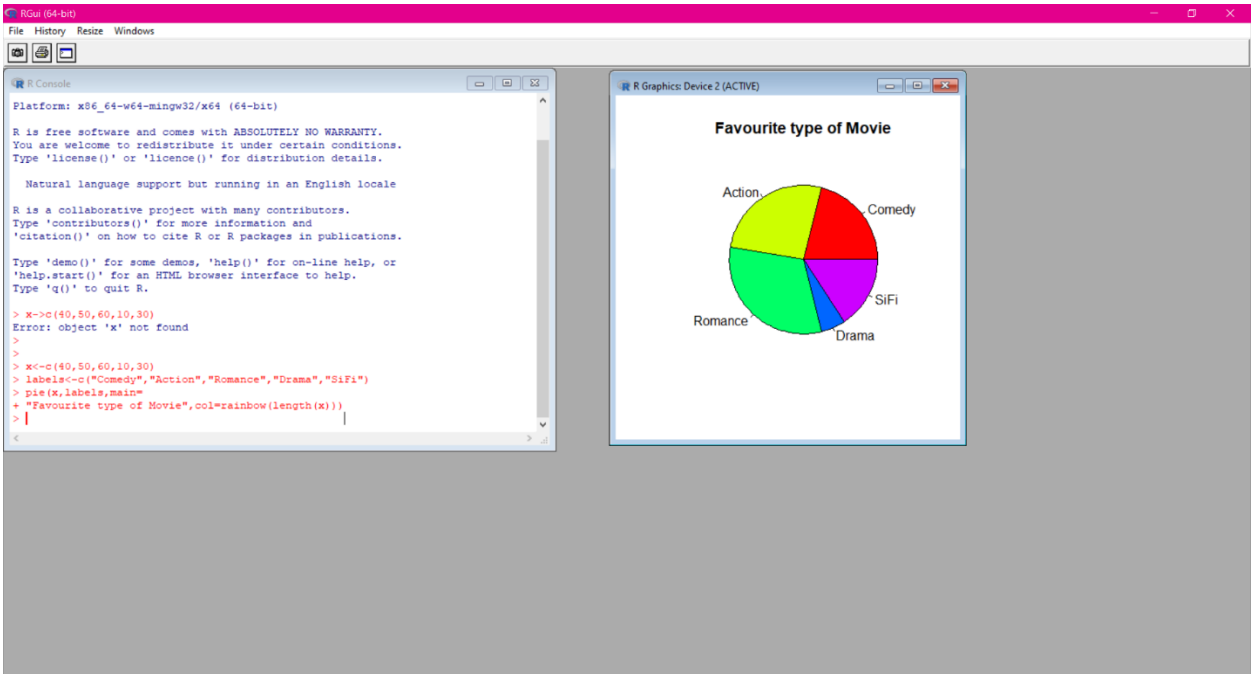
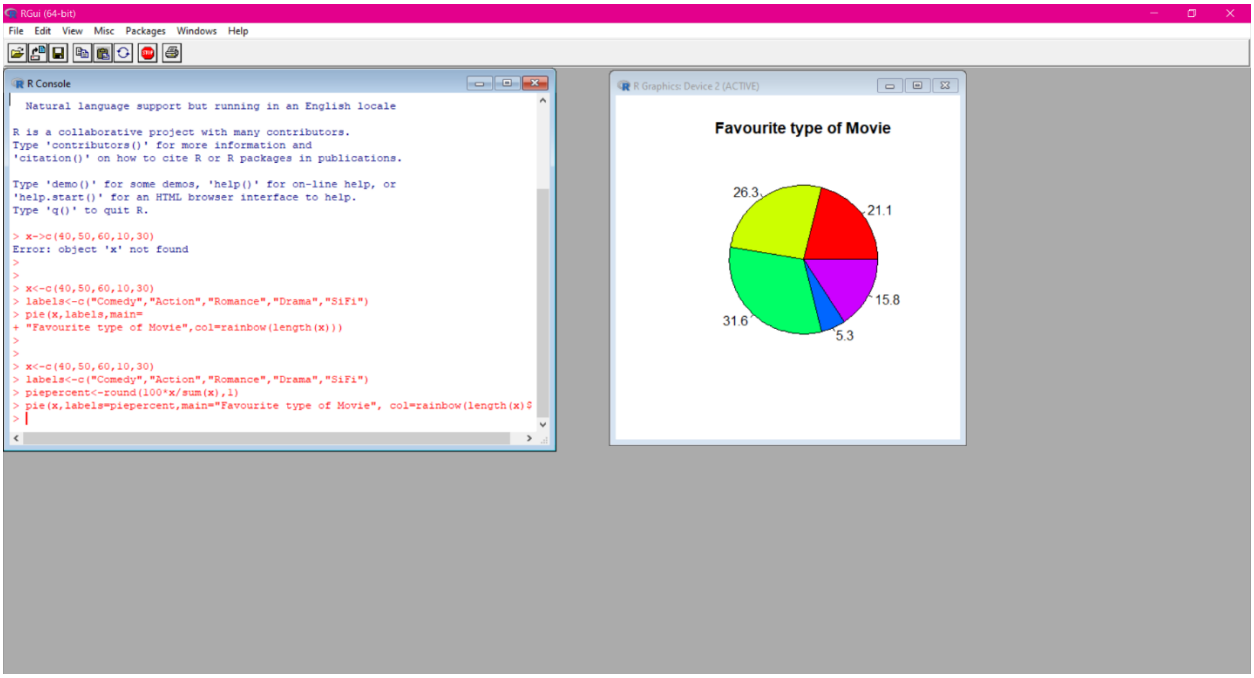
SCS2211 - Laboratory II Practical 4 - Descriptive Statistics

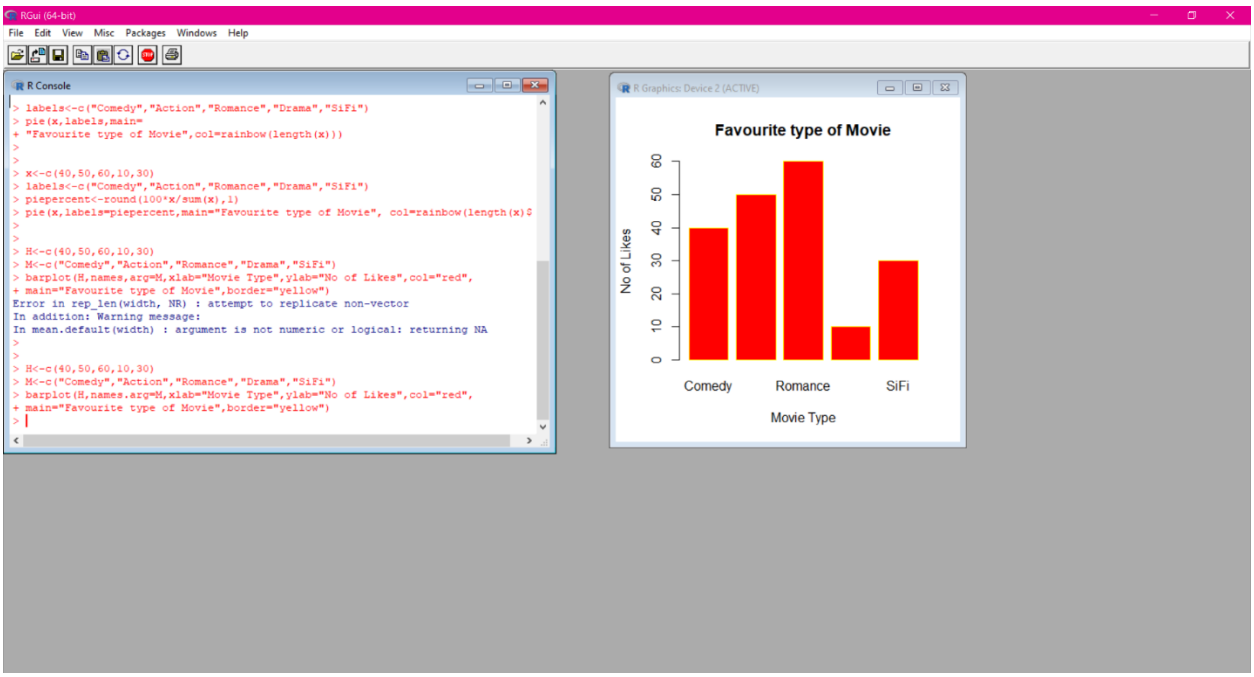
1.



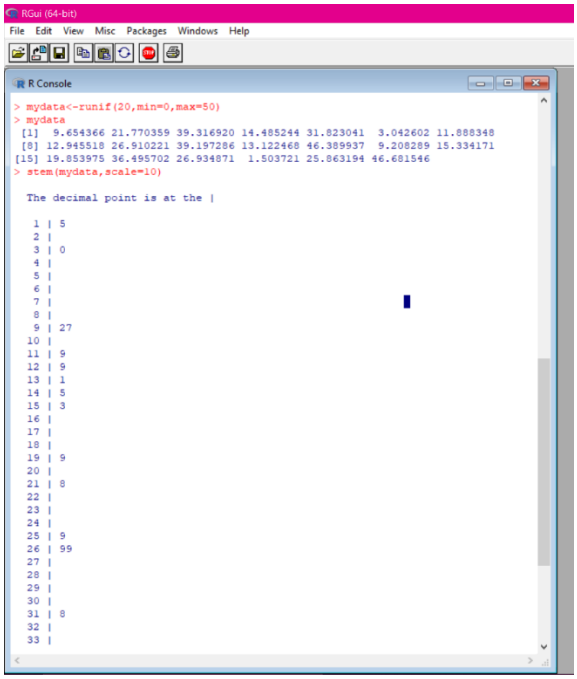
2.



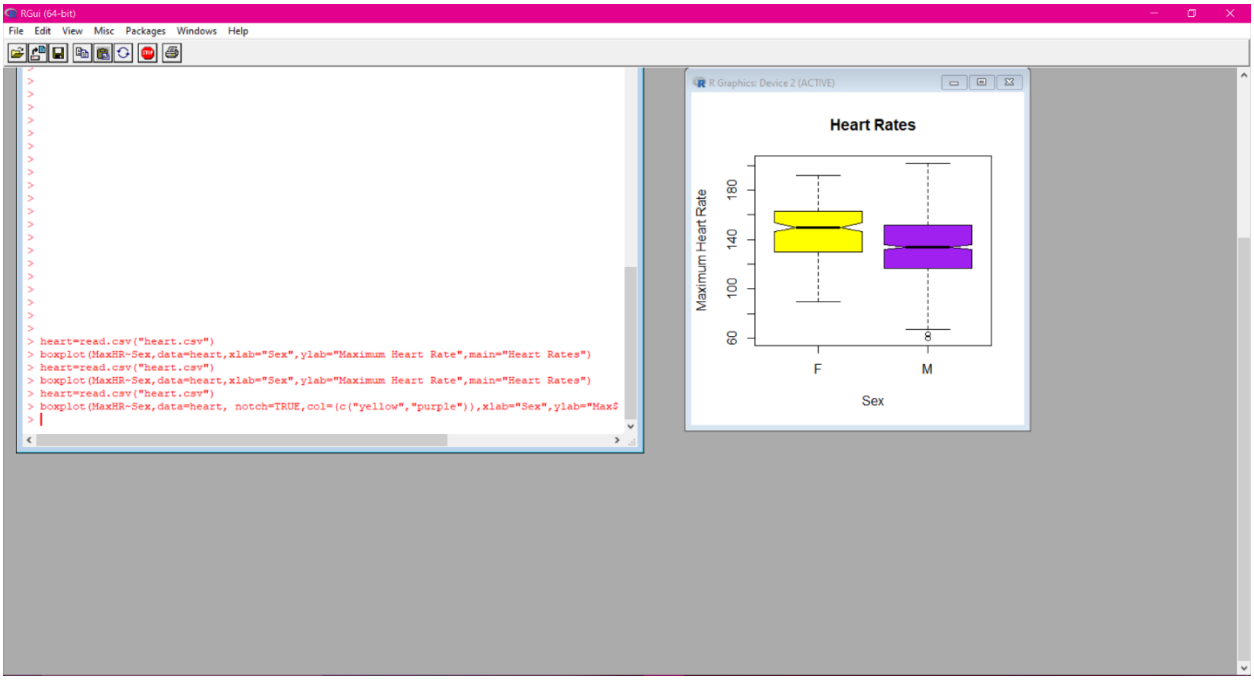
3.


RGui (64-bit)
File Edit View Misc Packages Windows Help
R Console
> labels<-c("Comedy","Action","Romance","Drama","SiFi")
> pie(x,labels,main=
+ "Favourite type of Movie",col=rainbow(length(x)))
> x<-c(40,50,60,10,30)
> labels<-c("Comedy","Action","Romance","Drama","SiFi")
> piepercent<-round(100*x/sum(x),1)
> pie(x,labels=piepercent,main="Favourite type of Movie", col=rainbow(length(x))$
> H<-c(40,50,60,10,30)
> M<-c("Comedy","Action","Romance","Drama","SiFi")
> barplot(H,names.arg=M,xlab="Movie Type",ylab="No of Likes",col="red",
+ main="Favourite type of Movie",border="yellow")
Error in rep_len(width, NR) : attempt to replicate non-vector
In addition: Warning message:
In mean.default(width) : argument is not numeric or logical: returning NA
> H<-c(40,50,60,10,30)
> M<-c("Comedy","Action","Romance","Drama","SiFi")
> barplot(H,names.arg=M,xlab="Movie Type",ylab="No of Likes",col="red",
+ main="Favourite type of Movie",border="yellow")
R Graphics: Device 2 (ACTIVE)
Favourite type of Movie
No of Likes
0
10
20
30
40
50
60
Comedy
Romance
SiFi
Movie Type

4.


RGui (64-bit)
File Edit View Misc Packages Windows Help
R Console
> mydata<-runif(20,min=0,max=50)
> mydata
[1] 9.654366 21.770359 39.316920 14.485244 31.823041 3.042602 11.888348
[8] 12.945518 26.910221 39.197286 13.122468 46.389937 9.208289 15.334171
[15] 19.853975 36.495702 26.934871 1.503721 25.863194 46.681546
> stem(mydata,scale=10)
The decimal point is at the |
1 | 5
2 |
3 | 0
4 |
5 |
6 |
7 |
8 |
9 | 27
10 |
11 | 9
12 | 9
13 | 1
14 | 5
15 | 3
16 |
17 |
18 |
19 | 9
20 |
21 | 8
22 |
23 |
24 |
25 | 9
26 | 99
27 |
28 |
29 |
30 |
31 | 8
32 |
33 |

5.

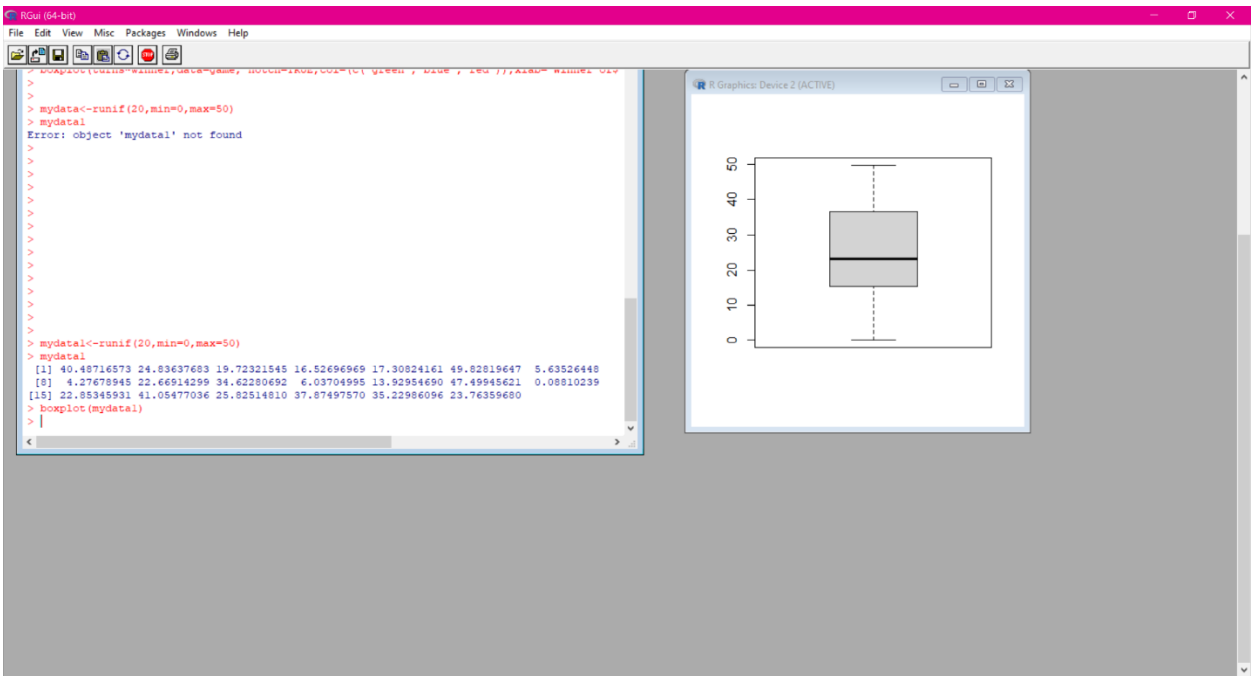


a) **Consider each boxplot, Are there any outliers in the plot, If present then in which boxplot?**
    a. **Yellow box plot**
b) **Consider each boxplot, is there any skewness, If then How the plot is skewed.**
    a. **Purple box plot – It's skewed to the left.**

6.

a) **Consider each boxplot, Are there any outliers in the plot, If present then in which boxplot.**
    a. **Outliers are presented in three box plot.**
b) **Consider each boxplot, Is there any skewness, If then How the plot is skewed.**
    a. **Each box plot has a skewness.**

7.



A. Find the five number summary (Minimum, Maximum, First Quartile, Third Quartile, and median), Range, Skewness.

- **a. Minimum – 0.2**
- **b. Maximum – 41.9**
- **c. First Quartile – 6.2**
- **d. Second Quartile – 20.1**
- **e. Third Quartile – 38.6**
- **f. Median – 20.1**
- **g. Range – (41.9-0.2) = 41.7**
- **h. Skewness – right skewness**

B. Are there any outliers in the plot?

- **a. No**