

CSA1668-DATA WAREHOUSING AND DATA MINING FOR PATTERN ANALYSIS

NAME:B.VINEETHA

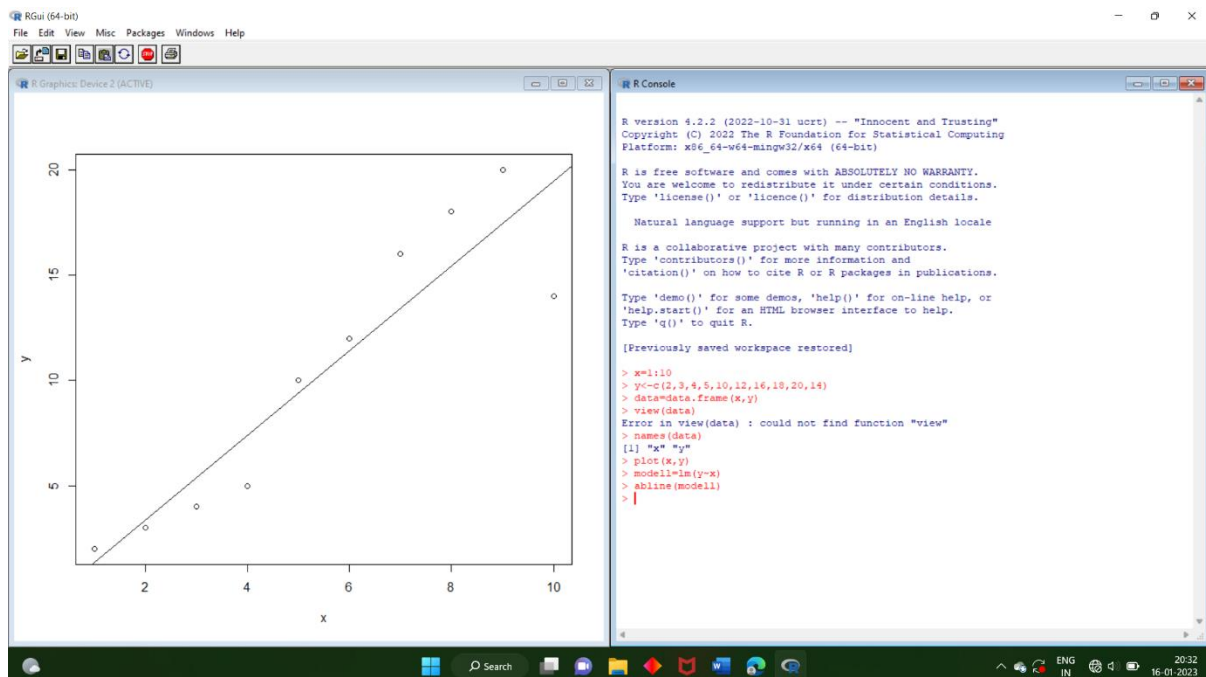
REG.NO:192110487

R PROGRAMMING:

ETL AND OLAP OPERATION USING KNIME DATA ANALYTICS PLATFORM.

PREDICTION ANALYSIS USING LINEAR REGRESSION THROUGH R TOOL.

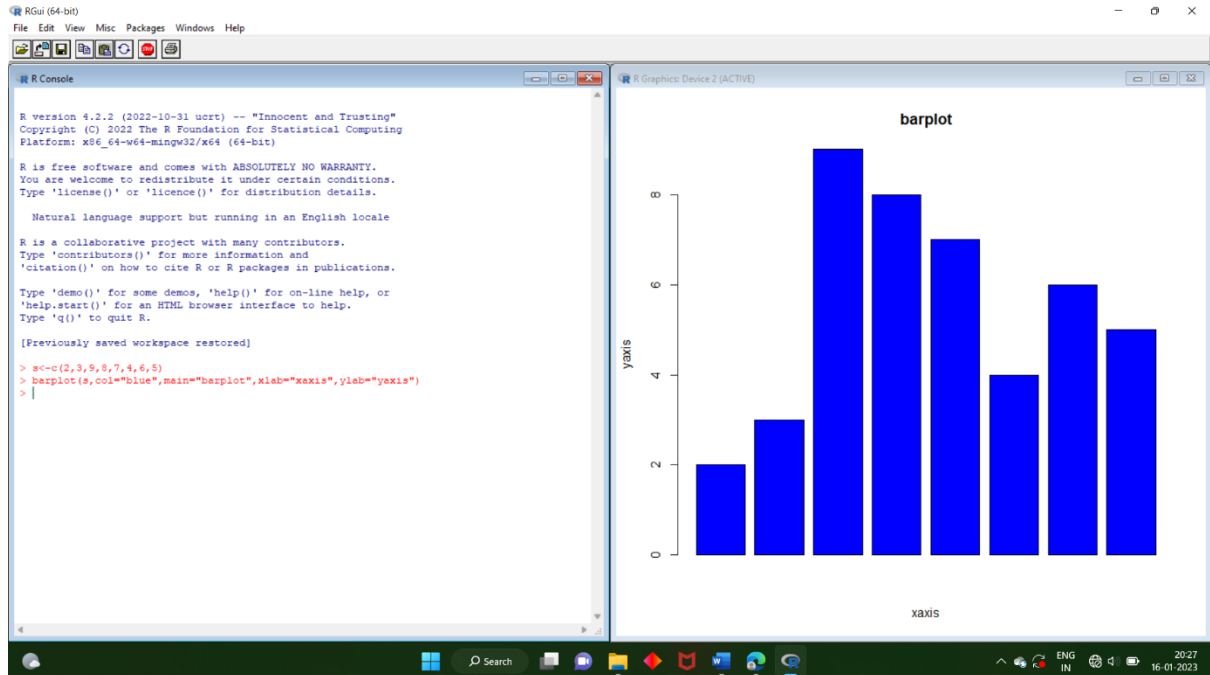
Output:



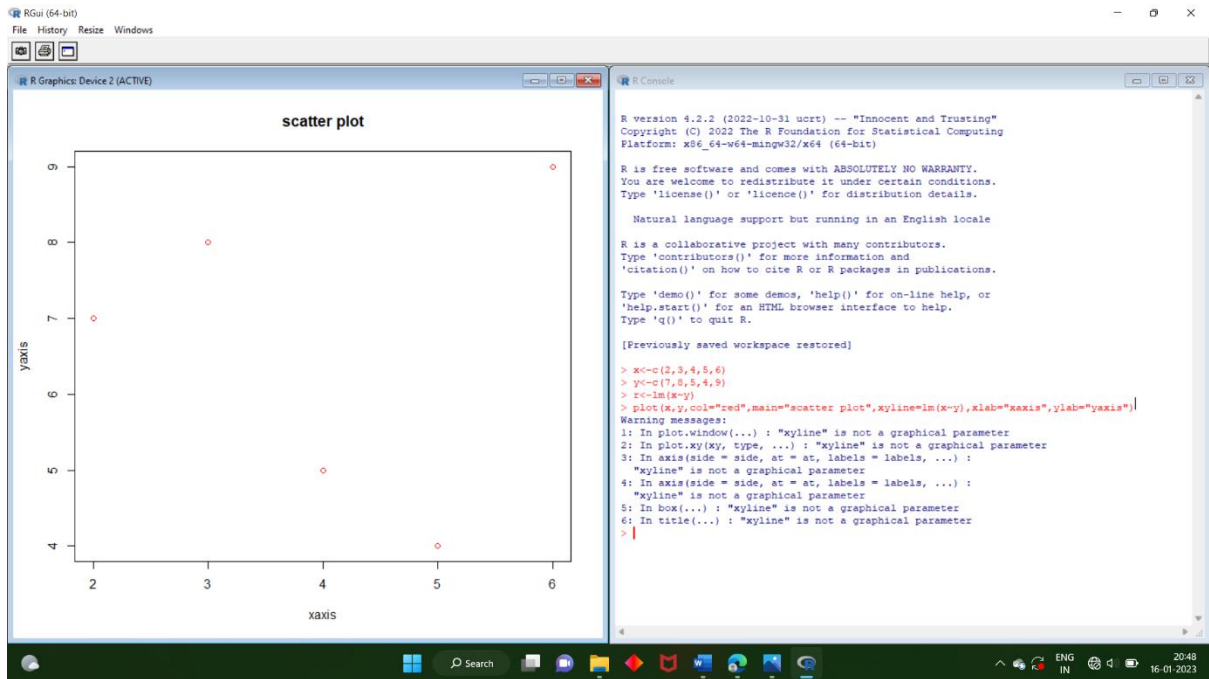
PLOTTING GRAPHS USING R TOOL

Output:

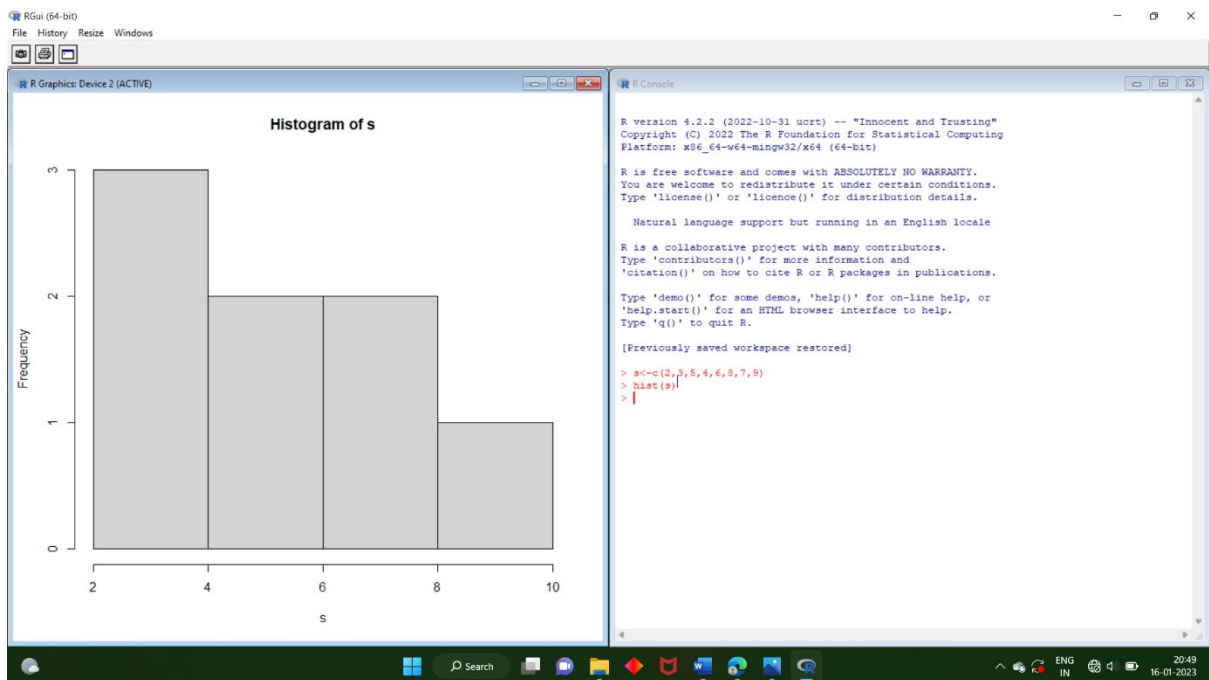
Barplot:



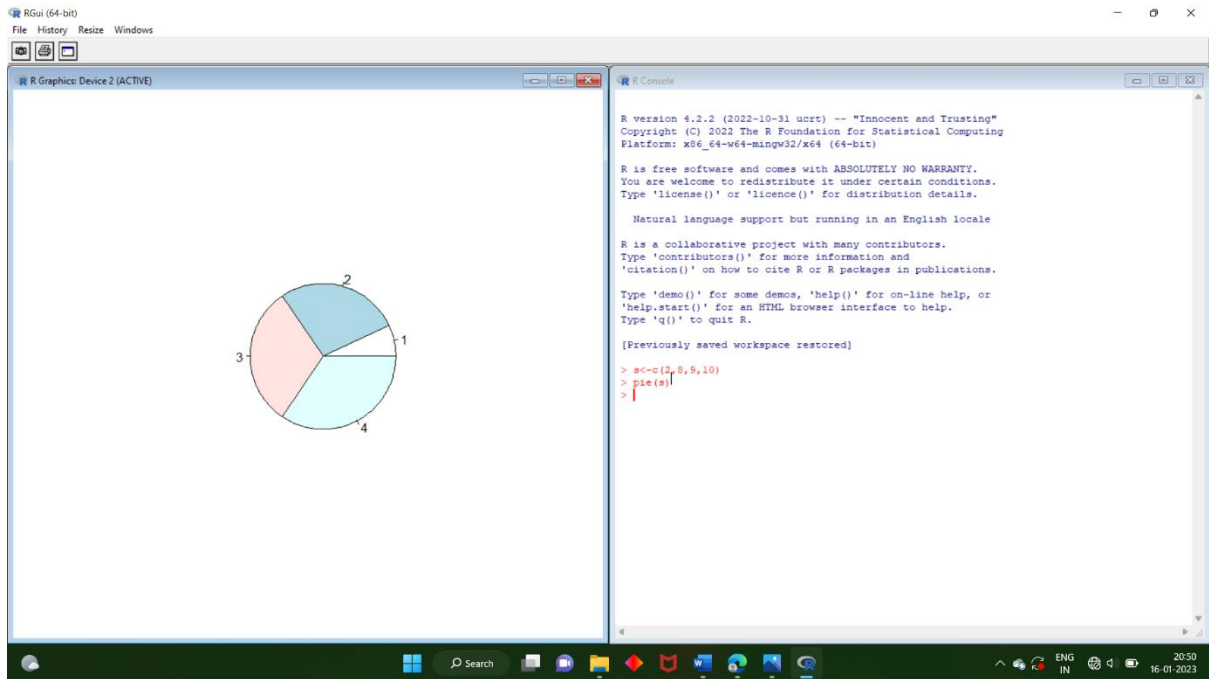
Scatterplot:



Histogram:



Piechart:



CENTRAL TENDENCY AND DATA DISPERSION MEASURES USING R-TOOL.

Output:

Mean and Median :

```
RGui (64-bit) - [R Console]
File Edit View Misc Packages Windows Help

Natural language support but running in an English locale

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

[Previously saved workspace restored]

> a<-c(7,6,8,4,5,9,7,3,6,7)
> result.m<-mean(a)
> print(result.m)
[1] 6.2
>
> a<-c(6,47,49,15,43,41,7,39,43,41,36)
> result.m<-mean(a)
> print(result.m)
[1] 33.36364
> a<-c(7,6,8,4,5,9,7,3,6,7)
> result.m<-median(a)
> print(result)
[1] 6.5
> a<-c(6,47,49,15,43,41,7,39,43,41,36)
> result.m<-median(a)
> print(result)
[1] 41
>
```

Mode:

```
RGui (64-bit) - [R Console]
File Edit View Misc Packages Windows Help

R version 4.2.2 (2022-10-31 ucrt) -- "Innocent and Trusting"
Copyright (C) 2022 The R Foundation for Statistical Computing
Platform: x86_64-mingw32/x64 (64-bit)

R is free software and comes with ABSOLUTELY NO WARRANTY.
You are welcome to redistribute it under certain conditions.
Type 'license()' or 'licence()' for distribution details.

Natural language support but running in an English locale

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

[Previously saved workspace restored]

> my_mode<-function(x){
+   unique_x<-unique(x)
+   tabulate_x<-tabulate(match(x,unique_x))
+   unique_x[tabulate_x==max(tabulate_x)]
+ }
> s<-c(14,21,18,21,14,35)
> my_mode(s)
[1] 14 21
> my_mode<-function(x){
+   unique_x<-unique(x)
+   tabulate_x<-tabulate(match(x,unique_x))
+   unique_x[tabulate_x==max(tabulate_x)]
+ }
> s<-c(13,15,16,16,19,20,20,20,20,21,22,22,22,25,25,25,30,33,40,45,46,52,52,70)
> my_mode(s)
[1] 20 22 25
> |
```

IQR,Range,Fivenumber summary,Boxplot :

```
RGui (64-bit) - [R Console]
File Edit View Misc Packages Windows Help

R version 4.2.2 (2022-10-31 ucrt) -- "Innocent and Trusting"
Copyright (C) 2022 The R Foundation for Statistical Computing
Platform: x86_64-mingw32/x64 (64-bit)

R is free software and comes with ABSOLUTELY NO WARRANTY.
You are welcome to redistribute it under certain conditions.
Type 'license()' or 'licence()' for distribution details.

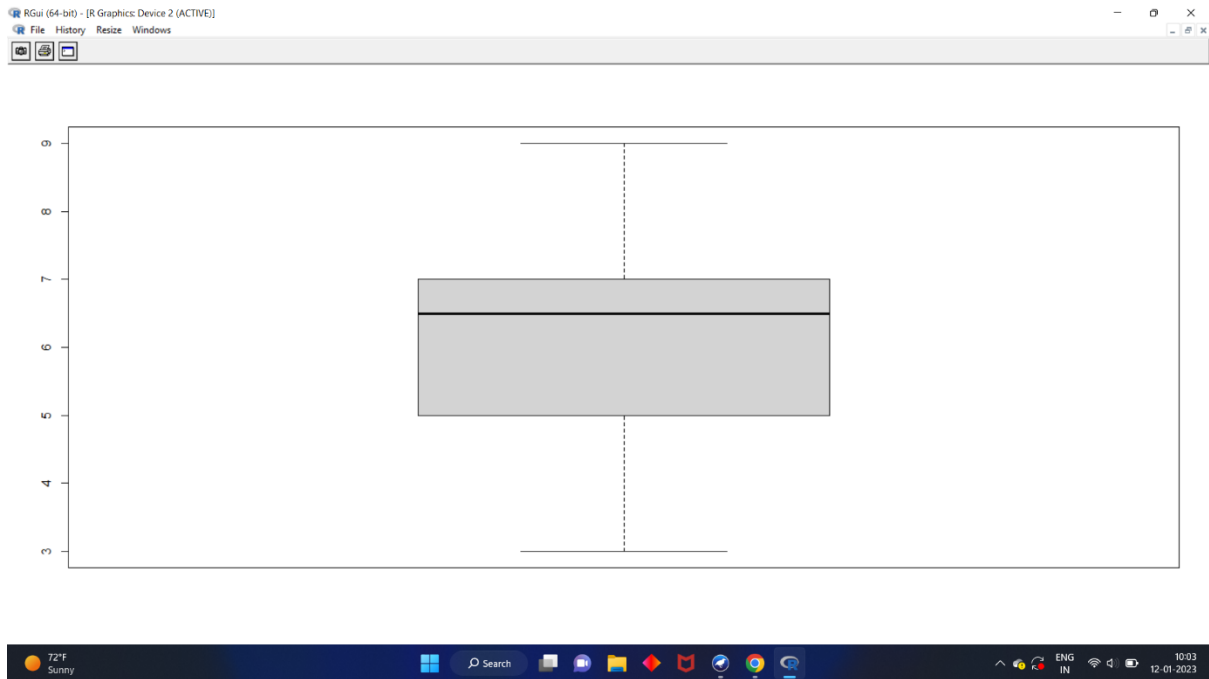
Natural language support but running in an English locale

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

[Previously saved workspace restored]

> s<-c(7,6,8,4,5,9,7,3,6,7)
> result=IQR(s)
> print(result)
[1] 1.75
> s<-c(7,6,8,4,5,9,7,3,6,7)
> result=range(s)
> print(result)
[1] 3 9
> s<-c(7,6,8,4,5,9,7,3,6,7)
> result=fivenum(s)
> print(result)
[1] 3.0 5.0 6.5 7.0 9.0
> s<-c(7,6,8,4,5,9,7,3,6,7)
> result=boxplot(s)
> |
```



REGRESSION ANALYSIS USING R TOOL.

