R programming

Venkata Varun Mangu

192111125

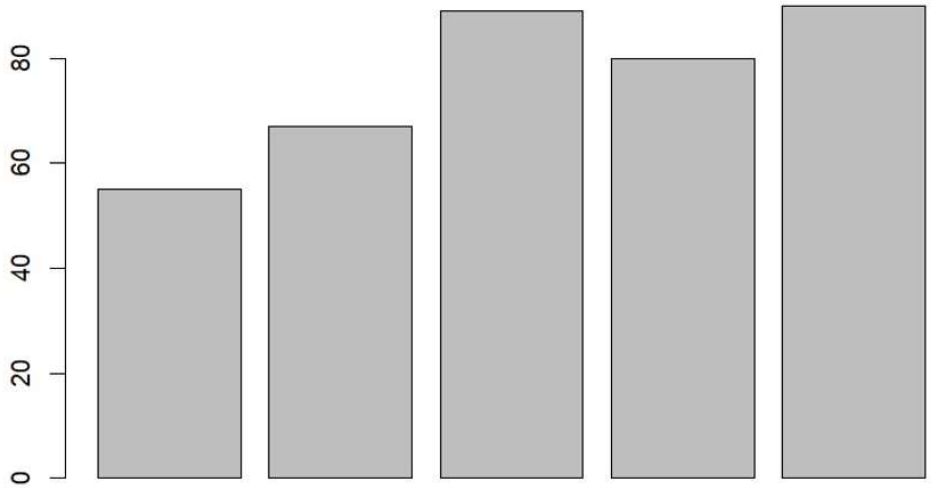
Bar plot:

Aim: to implement and design bar plot in r tool.

Syntax:

```
a<-c(55,67,89,80,90)
barplot(a)
```

output:



Coefficient corelation

AIM: To implement coefficient corelation using R studio

SYNTAX:

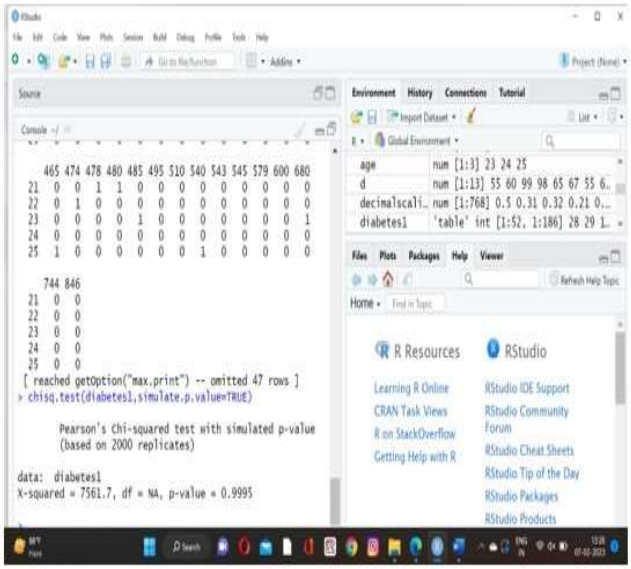
diabetes1<-read.csv("C:/Users/Lenovo/Downloads/diabetes.csv")

diabetes1<-table(diabetes1 $Age,diabetes1 $Insulin)

diabetes1

chisq.test(diabetes1,simulate.p.value=TRUE)\

OUTPUT:



Decimal scaling

Aim: to implement and design decimal scaling in r tool.

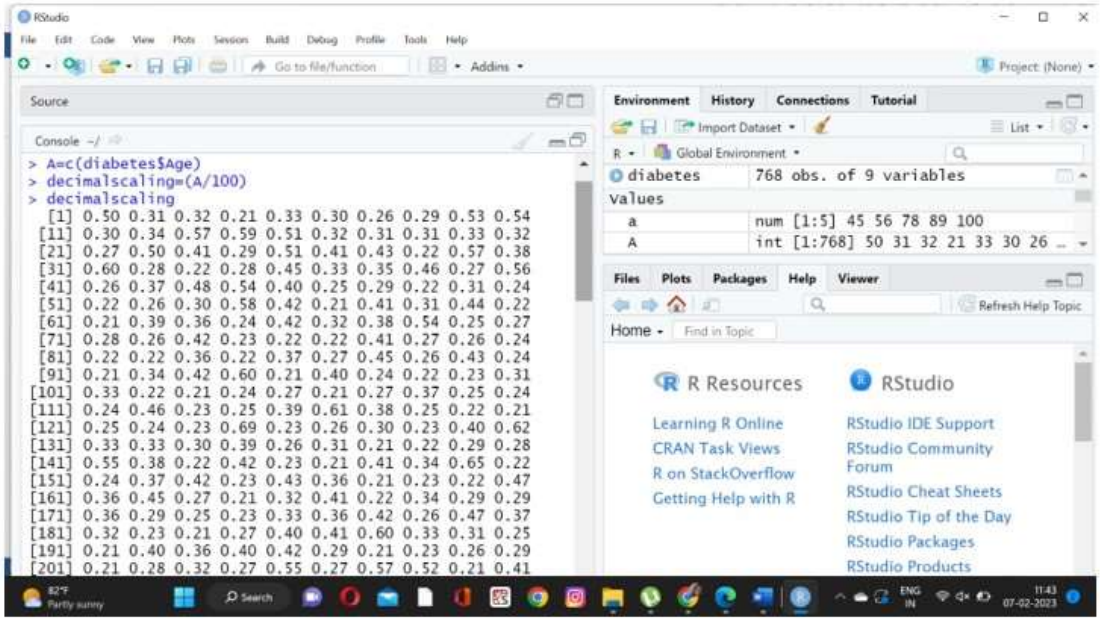
Formula:

A/100

Syntax:

```
diabetes=read.csv("C:/Users/Lenovo/Downloads/diabetes.csv")
A=c(diabetes$Age)
decimalscaling=(A/100)
decimalscaling
```

output:



Aim: To implement five summary data using r tool

Formula:

Minimum

Lower quartile

Median

Upper quartile

Maximum

Syntax:

names<-c ("Sanju", "Gupta")

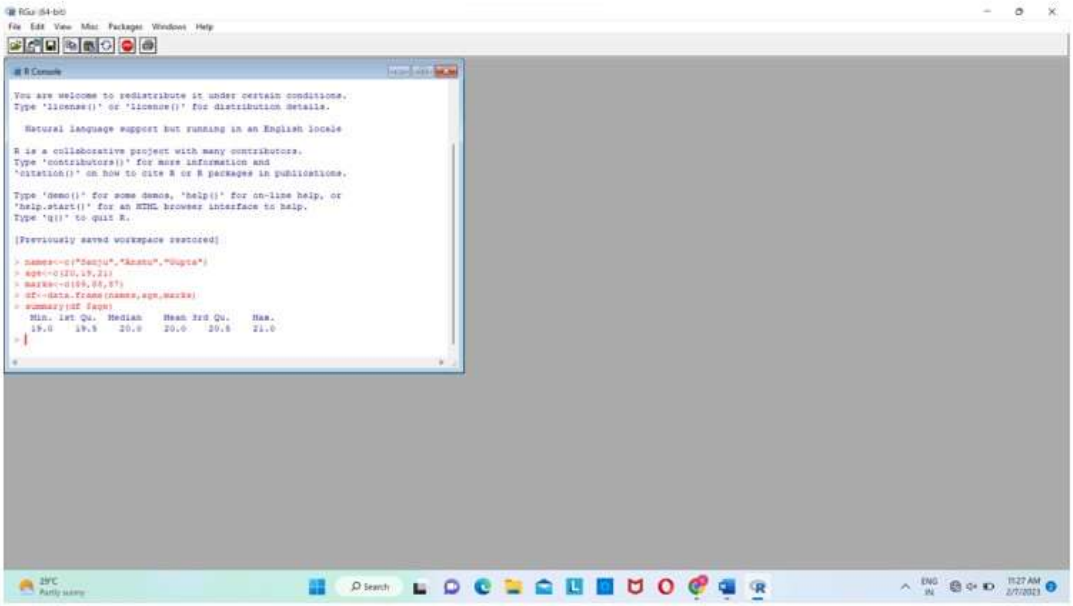
age<-c (20,19,21)

marks<-c (89,88,87)

d f<-data. Frame (names, age, marks)

summary (d f $age)

Output:



HISTOGRAM

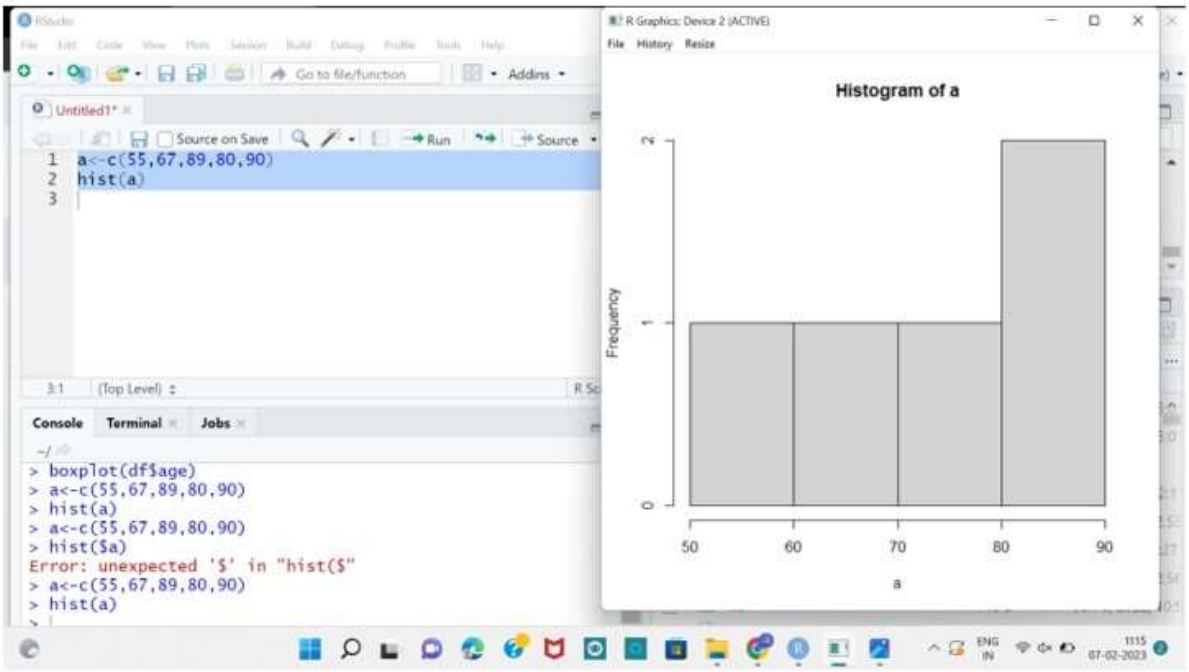
AIM: To implement histogram in R Studio

SYNTAX:

A<-c(12,45,67,89)

hist(A)

OUTPUT:



AIM : The aim is to implement linear regression using RStudio.

Syntax:

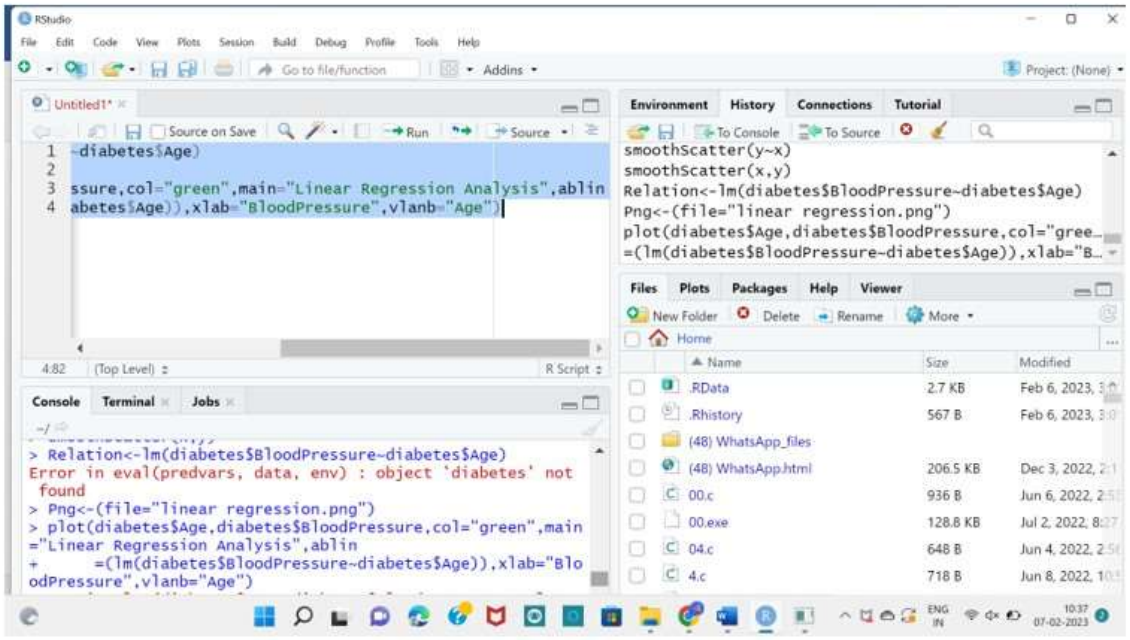
Relation<-lm(diabetes$BloodPressure~diabetes$Age)

Png<-(file="linear regression.png")

plot(diabetes$Age,diabetes$BloodPressure,col="green",main ="Linear Regression Analysis",ablin

=(lm(diabetes$BloodPressure~diabetes$Age)),xlab="BloodPr essure",vlanb="Age")

Output:



MEAN

Aim: To implement mean using r tool

Formula:

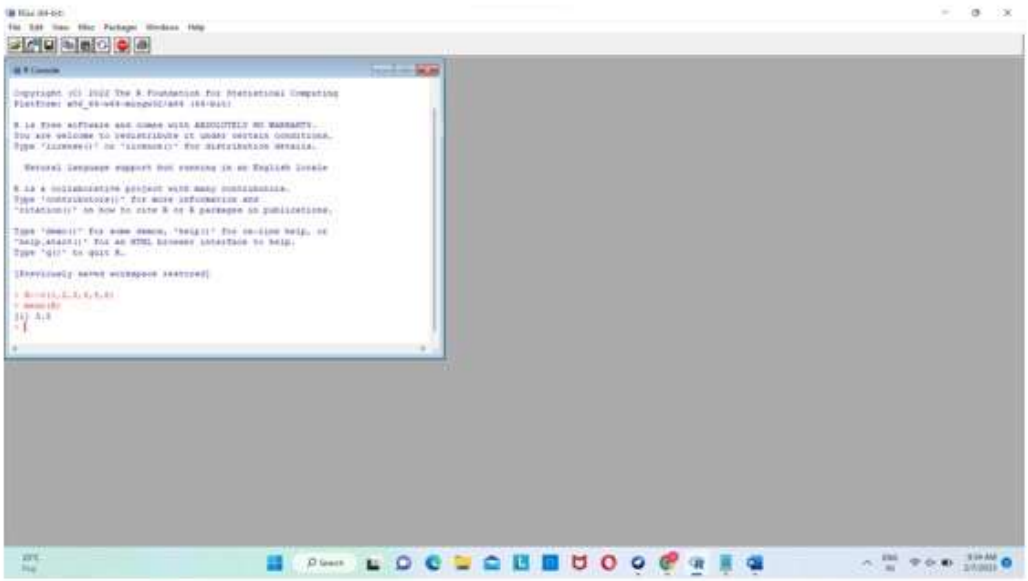
sum of observations/no. of observations

syntax:

R<c ( )

Mean(R)

OUTPUT:

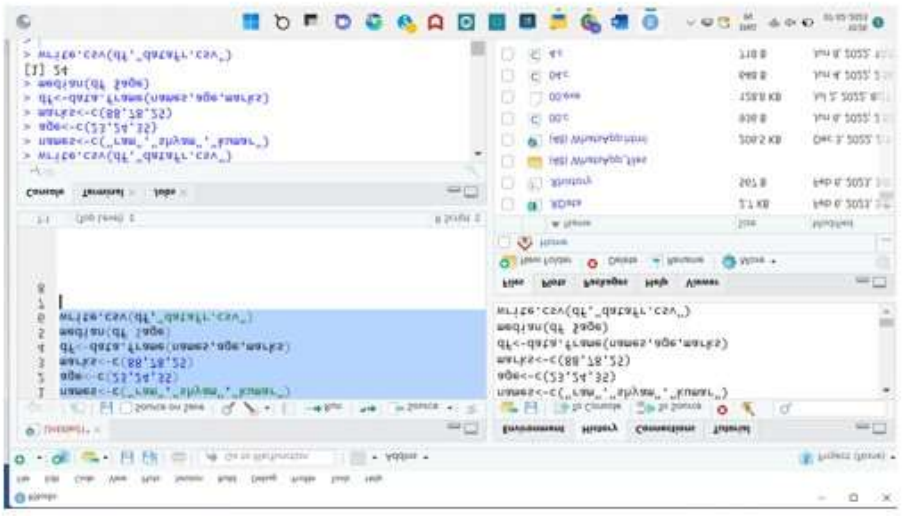


AIM: TO IMPLEMENT MEDIAN IN RSTUDIO

SYNTAX:

```
names<-c("ram","shyam","kumar")
age<-c(23,24,35)
marks<-c(88,78,25)
df<-data.frame(names,age,marks)
median(df $age)
```

OUTPUT:

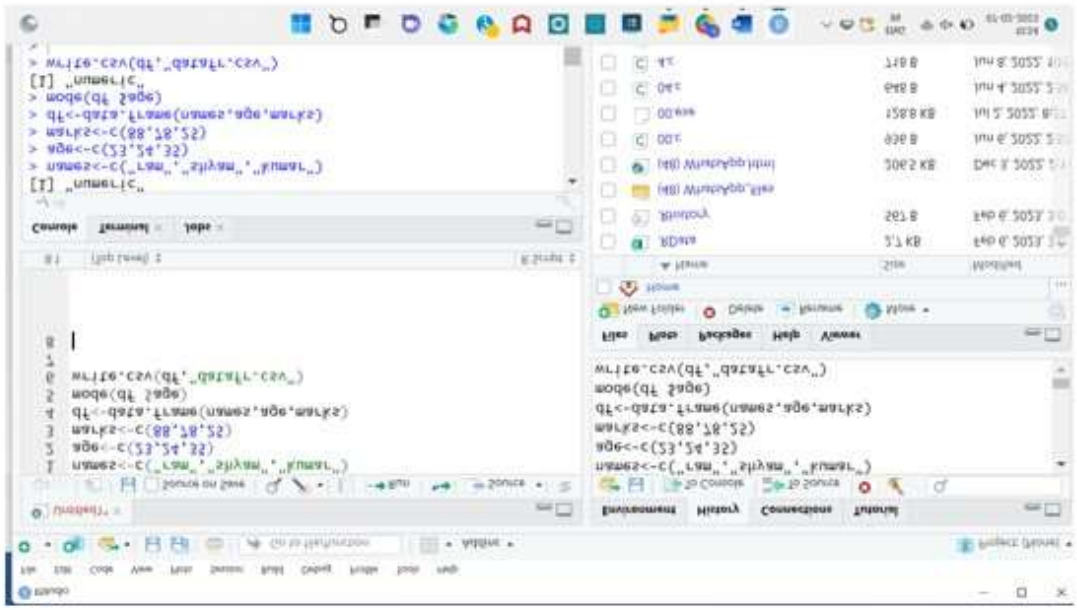


AIM: TO IMPLEMENT MODE IN RSTUDIO

SYNTAX:

```
names<-c("ram","shyam","kumar")
age<-c(23,24,35)
marks<-c(88,78,25)
df<-data.frame(names,age,marks)
mode(df $age)
```

OUTPUT:



File History Resize Windows

R Console

```
> print("Enter the value of weight:- ")
[1] "Enter the value of weight:- "
> a <- scan()
1: print("Enter the value of height:- ")
Error in scan() : scan() expected 'a real', got
> b <- scan()
1: plot(a,b,xlab="weight",ylab="height",main="
Error in scan() :
  scan() expected 'a real', got 'plot(a,
> a <- scan()
1: 20
2: 30
3: 40
4:
Read 3 items
> b <- scan()
1: 1
2: 2
3: 3
4:
Read 3 items
> plot(a,b,xlab="weight",ylab="height",ma
>
```

C:\Users\VENKATA VARUN\Documents\binning.R - R Editor

```
print("Enter the value of weight:- ")
a <- scan()
print("Enter the value of height:- ")
b <- scan()
plot(a,b,xlab="weight",ylab="height",main="weight vs height")
```