ADDITION:

num1=as.integer(readline(prompt="enter a number1 : "))

num2=as.integer(readline(prompt="enter a number2 : "))

num3=num1+num2

print(num3)

SUBTRACTION:

num1=as.integer(readline(prompt="enter a number1 : "))

num2=as.integer(readline(prompt="enter a number2 : "))

num3=num1-num2

print(num3)

ODD OR EVEN

num=as.integer(readline(prompt="enter a number : "))

if((num%%2)==0){

print('Number is even')

}else{

print('Number is odd')

}

MEAN

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

age<-c(20,19,21)

marks<-c(89,88,87)

df<-data.frame(names,age,marks)

mean(df $age)

write.csv(df,"datafr.csv")

MEDIAN

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

age<-c(20,19,21)

marks<-c(89,88,87)

df<-data.frame(names,age,marks)

median(df $age)

write.csv(df,"datafr.csv")

MODE

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

age<-c(20,19,21)

marks<-c(89,88,87)

df<-data.frame(names,age,marks)

mode(df $age)

write.csv(df,"datafr.csv")

SUMMARY

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

age<-c(20,19,21)

marks<-c(89,88,87)

df<-data.frame(names,age,marks)

summary(df $age)

write.csv(df,"datafr.csv")

IQR

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

age<-c(20,19,21)

marks<-c(89,88,87)

df<-data.frame(names,age,marks)

IQR(df $age)

write.csv(df,"datafr.csv")

QUANTILE

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

age<-c(20,19,21)

marks<-c(89,88,87)

df<-data.frame(names,age,marks)

quantile(df $age)

write.csv(df,"datafr.csv")

RANGE

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

age<-c(20,19,21)

marks<-c(89,88,87)

df<-data.frame(names,age,marks)

range(df $age)

write.csv(df,"datafr.csv")

BOX PLOT

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

age<-c(23,24,35)

marks<-c(89,88,87)

df<-data.frame(names,age,marks)

hist(df $age)

boxplot(df$age)

BARPLOT

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

barplot(a)

HORIZONTAL BARPLOT

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

barplot(a)

barplot(a,horiz=TRUE)

HISTOGRAM

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

hist(a)

SCATTER PLOT

set.seed(9)

x<-rnorm(1000)

y<-rnorm(1000)

smoothScatter(y~x)

smoothScatter(x,y)

CORRELATION ANALYSIS

diabetes1<-read.csv("D:\\DWHDM\\diabetes.csv")

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

diabetes1

chisq.test(diabetes1)

ZSCORE NORMALIZATION

diabetes<-read.csv("D:\\DWHDM\\diabetes.csv")

A<-c(diabetes$Age)

Mean<-mean(A)

Std<-sd(A)

Zscore<-(A-Mean)/std

Zscore

MEAN NORMALIZATION

diabetes<-read.csv("D:\\DWHDM\\diabetes.csv")

A<-c(diabetes$Age)

Mean<-mean(A)

MINIMUM NORMALIZATION

diabetes<-read.csv("D:\\DWHDM\\diabetes.csv")

A<-c(diabetes$Age)

Minimum<-min(diabetes$Age)

MAXIMUM NORMALIZATION

diabetes<-read.csv("D:\\DWHDM\\diabetes.csv")

A<-c(diabetes$Age)

Maximum<-max(diabetes$Age)

MINMAX NORMALIZATION

diabetes<-read.csv("D:\\DWHDM\\diabetes.csv")

A<-c(diabetes$Age)

Minmax<-(A-Minimum)/(Maximum-Minimum)

DECIMAL SCALING NORMALIZATION

diabetes<-read.csv("D:\\DWHDM\\diabetes.csv")

A=c(diabetes$Age)

decimalscaling=(A/100)

decimalscaling

LINEAR REGRESSION

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

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

plot(diabetes$Age,diabetes$BloodPressure,col="green",main="Linear Regression Analysis",abline=(lm(diabetes$BloodPressure~diabetes$Age)),xlab="BloodPressure",vlanb="Age")

MULTIPLE REGRESSION

Input<-diabetes[c("Age","BloodPressure","Glucose")]

model<-lm(Age~BloodPressure+Glucose,dat=input)

print(model)