DWDM LAB PRACTCAL PROGRAMS IN R-PROGRAMING

CODE: CSA1699

QUESTION-0: summary

names<-c("siri","mahi","chiru")

age<-c(23,24,25)

marks<-c(88,78,25)

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

summary(df $age)

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

QUESTION-1: Odd or even

num<-as.integer(readline(prompt="Enter number:"))

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

{

print("the number is even")

}else{

print("the numbr is odd")

}

QUESTION-2: MUL B/W TWO NUM

a<-as.integer(readline(prompt="Enter number1:"))

b<-as.integer(readline(prompt="Enter number2:"))

mul<-a\*b

print(paste("mul=",a\*b ))

QUESTION-3:MULTIPLE REGRESSION

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

Model <- lm(Age~ BloodPressure+Glucose,data=input)

Print(model)

QUESTION-4: SUB OF NUM

a<-as.integer(readline(prompt="Enter number1:"))

b<-as.integer(readline(prompt="Enter number2:"))

sub<-a-b

print(paste("sub=",a-b ))

QUESTION-5: mean,median,mode

Mean

names<-c("siri","mahi","chiru")

age<-c(23,24,25)

marks<-c(88,78,25)

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

mean(df $age)

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

Median

names<-c("siri","mahi","chiru")

age<-c(23,24,25)

marks<-c(88,78,25)

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

median(df $age)

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

Mode

names<-c("siri","mahi","chiru")

age<-c(23,24,25)

marks<-c(88,78,25)

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

mode(df $age)

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

QUESTION-6: mean,max,min,minmax

mean

diabetest1<-read\_excel("C:/Users/M.Geetha/Downloads/NARA.xlsx")

A<-c(diabetest1$Age)

Mean<-mean(A)

minimum

diabetest1<-read\_excel("C:/Users/M.Geetha/Downloads/NARA.xlsx")

A<-c(diabetest1$Age)

Minimum<-Min(diabetest1$Age)

maximum

diabetest1<-read\_excel("C:/Users/M.Geetha/Downloads/NARA.xlsx")

A<-c(diabetest1$Age)

Maximum<-Max(diabetest1$Age)

minmax

diabetest1<-read\_excel("C:/Users/M.Geetha/Downloads/NARA.xlsx")

A<-c(diabetest1$Age)

Maximum<-Max(diabetest1$Age)

Minimum<-Min(diabetest1$Age)

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

MinMax

QUESTION-7: histogram 16q

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

hist(a)

QUESTION-8: greatest among the three numbers

x <- as.integer(readline(prompt = "Enter first number :"))

y <- as.integer(readline(prompt = "Enter second number :"))

z <- as.integer(readline(prompt = "Enter third number :"))

if (x > y && x > z) {

print(paste("Greatest is :", x))

} else if (y > z) {

print(paste("Greatest is :", y))

} else{

print(paste("Greatest is :", z))

}

QUESTION-9: division

a<-as.integer(readline(prompt="Enter number1:"))

b<-as.integer(readline(prompt="Enter number2:"))

div<-a/b

print(div)

QUESTION-10: correlation analysis

diabetest1<-read\_excel("C:/Users/M.Geetha/Downloads/NARA.xlsx")

diabetest1<-table(diabetest1 $Age,diabetest1 $Insulin)

diabetest1

chisq.test(diabetest1)

QUESTION-11: bar plot

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

barplot(a)

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

barplot(a)

barplot(a,horiz=TRUE)

QUESTION-12: addition number

a<-as.integer(readline(prompt="Enter number1:"))

b<-as.integer(readline(prompt="Enter number2:"))

sum<-a+b

print(paste("sum=",a+b ))

QUESTION-13: Scatter plot

set.seed(9)

x <- rnorm(1000)

y <- rnorm(1000)

smoothScatter(y - x)

smoothScatter(x,y)

QUESTION-14: Box plot

names<-c("siri","chru","loki")

age<-c(23,24,25)

marks<-c(88,78,25)

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

hist(df$age)

boxplot(df$age)

QUESTION-15: 9 central tendency and data depression

names<-c("siri","mahi","chiru")

age<-c(23,24,25)

marks<-c(88,78,25)

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

IQR(df $age)

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

QUESTION-16: 12 Z-Score normallization

diabetest1<-read\_excel("C:/Users/M.Geetha/Downloads/NARA.xlsx")

A<-c(diabetest1$Age)

Mean<-mean(A)

Std<-sd(A)

Zscore<-(A-Mean)/Std

Zscore

QUESTION 17: 11 central tendency and data depression

names<-c("siri","mahi","chiru")

age<-c(23,24,25)

marks<-c(88,78,25)

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

mid range(df $age)

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

QUESTION 18: 10 central tendency and data depression

names<-c("siri","mahi","chiru")

age<-c(23,24,25)

marks<-c(88,78,25)

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

quantile(df $age)

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

QUESTION 19: Linear regression

PROGRAM:

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”, ylanb= “Age”)