#import data set

DataSet<-read.csv(file = "C:/Users/megan/Downloads/Data Set.csv")

View(DataSet)

#myvariables

(myvar<-DataSet[,1:3])

#central tendency

summary(myvar$TOTCNG)

summary(myvar$TOTADH)

summary(myvar$TOTRATE)

#mean

mean(DataSet$TOTCNG,na.rm = T)

mean(DataSet$TOTADH,na.rm = T)

mean(DataSet$TOTRATE,na.rm = T)

#median

median(DataSet$TOTCNG,na.rm = T)

median(DataSet$TOTADH,na.rm = T)

median(DataSet$TOTRATE,na.rm = T)

#mode

new1<-table(as.vector(DataSet$TOTCNG))

names(new1[new1==max(new1)])

new2<-table(as.vector(DataSet$TOTADH))

names(new2[new2==max(new2)])

new3<-table(as.vector(DataSet$TOTRATE))

names(new3[new3==max(new3)])

#Variation

#variance

var(DataSet$TOTCNG,na.rm = T)

var(DataSet$TOTADH,na.rm = T)

var(DataSet$TOTRATE,na.rm = T)

#range

range(DataSet$TOTCNG,na.rm = T)

range(DataSet$TOTADH,na.rm = T)

range(DataSet$TOTRATE,na.rm = T)

#standard deviation

sd(DataSet$TOTCNG,na.rm = T)

sd(DataSet$TOTADH,na.rm = T)

sd(DataSet$TOTRATE,na.rm = T)

#ways to check my variables are approximating normality

#boxplot

boxplot(DataSet$TOTCNG)

boxplot(DataSet$TOTADH)

boxplot(DataSet$TOTRATE)

#Q-Q Plot

qqnorm(myvar$TOTCNG); qqline(myvar$TOTCNG)

qqnorm(myvar$TOTADH); qqline(myvar$TOTADH)

qqnorm(myvar$TOTRATE); qqline(myvar$TOTRATE)