#mean

> data=read.csv("D:/crop\_production.csv")

>mean=mean(data$Area)

>cat("the mean value of Area is",mean)

the mean value of Area is 12002.82>

#median

>median=median(data$Area)

>cat("the median value of Area is",median)

the median value of Area is 582>

**#standard deviation**

standard\_deviation=sd(data$Area)

cat(" the standard deviation value od Area is",standard\_deviation)

the standard deviation value od Area is 50523.4>

**#Variance**

**variance = var(data$Area)**

**cat("The variance value of Area is ",variance)**

**The variance value of Area is 2552614354>**

**#skewness**

**numerator = 3\*(mean-median)**

**value = numerator/standard\_deviation**

**cat("The skewness value is ",value)**

**The skewness value is 0.6781503**

**#Mean Deviation**

**mean = mean(data$Area)**

**column = data$Area - mean**

**mean\_dev = mean(column)**

**cat("The mean deviation value of Area is ",mean\_dev)**

**The mean deviation value of Area is 1.10592e-12>**

**#Geometric Mean:**

**geo\_mean <- function(data) {**

log\_data <- log(data) gm <- exp(mean(log\_data[is.finite(log\_data)])) return(gm)

**}**

**geometric\_mean = geo\_mean(data$Area)**

**cat("The Geometric Mean value of Area is ",geometric\_mean)**

**#Range**

**range\_value = range(data$Area)**

**cat("The Range value of Matches is ",range\_value)**

**The Range value of Matches is 0.04 8580100>**

**#nth Percentile**

**Area= data$Area**

**percentile = quantile(Area, c(.32, .57, .98))**

**cat("The percentile value of Area is ",percentile)**

**The percentile value of Area is 143 1000 137400>**

**#First and Second Quartile**

**first = quantile(data$Area,0.25)**

**second = quantile(data$Areas,0.5)**

**cat("The First and Second Quartile values are ",first,second)**

**The First and Second Quartile values are 80 NA>**

**#Quartile Deviation**

**first = quantile(data$Area,0.25)**

**third = quantile(data$Area,0.75)**

**Quartile\_Deviation= (third-first)/2**

**cat("The Quartile Deviation value of Matches is ",Quartile\_Deviation)**

**The Quartile Deviation value of Matches is 2156>**

**#Any two deciles**

**first = quantile(data$Area,0.1)**

**second = quantile(data$Area,0.2)**

**cat("The two deciles value of Area is ",first,second)**

**The two deciles value of Area is 12 48>**

**#sum of column values**

**sum = sum(data$Area)**

**cat("The sum of values of Area column is ",sum)**

**The sum of values of Area column is 2953786189>**

**#Minimum of column values**

**Minimum = min(data$Area)**

**cat("The Minimum values of Area column is ",Minimum)**

**The Minimum values of Area column is 0.04>**

**#Maximum of column values**

**Maximum = max(data$Area)**

**cat("The Maximum values of Area column is ",Maximum)**

**The Maximum values of Area column is 8580100>**

**#Harmonic Mean**

**col = data$Area**

**sum=0**

**for(i in col){**

**val = (1/i)**

**sum = sum + val**

**}**

**numerator = length(data$Area)**

**harmonic\_mean = (numerator/sum)**

**cat("The harmonic mean is ",harmonic\_mean)**

**The harmonic mean is 22.02765>**