**Code Milestone Three && Four.**

Hello professor, here is the code for milestone three (link [here](https://github.com/TheWizard91/Math327ProjectOne)) and I added the link to the website? Be were that I have a lot of code there because there is code for milestones one and two. Link in [here](https://sites.google.com/d/1s7CP6Id3-hpjPK4bPY933-ToeJwIzFaj/p/1DXMA4ZWEb8ZPGYQQiTdPITHG3BT4NW_g/edit).

But if look towards the end you will see the milestone three code...

**Initializing Data, Cleaning Data, and Plot Histogram Graphs.**

# **Initial code needed to read the file later.**

library(readr)

# **Gets me the file loaded in countries.**

vaccinations\_per\_country<-read\_csv("country vaccinations.csv",na="-")

# **To view the vaccinations\_per\_country.**

View(vaccinations\_per\_country)

# **Getting rid of the empty values.**

vaccinations\_per\_country\_without\_na<-na.omit(vaccinations\_per\_country)

# **View the data w/t the empty values.**

View(vaccinations\_per\_country\_without\_na)

# **To view the countries.**

vaccinations\_per\_country\_without\_na$country

# **To obtain the name of all the columns.**

colnames(vaccinations\_per\_country\_without\_na)

# **Put all the columns on a new var.**

nameOfAllColumns<-colnames(vaccinations\_per\_country\_without\_na)

**#** **Histogram of tot vaccination per hundred empty values.**

hist(vaccinations\_per\_country$total\_vaccinations\_per\_hundred,main="Total Vaccinations Per Hundred WNA",xlab="Number Of Vaccinations",ylab="Population Up To Date",col="green",border="blue",las=1,breaks=20)

**#** **Histogram of tot vaccination per hundred.**

hist(vaccinations\_per\_country\_without\_na$total\_vaccinations\_per\_hundred,main="Total Vaccinations Per Hundred",xlab="Number Of Vaccinations",ylab="Population Up To Date",col="green",border="blue",las=1,breaks=20)

**# Histogram of Total Number Of People Vaccinations Per Hundred with empty values.**

hist(vaccinations\_per\_country$people\_vaccinated\_per\_hundred,main="Total Number Of People Vaccinations Per Hundred WNA",xlab="Population Immunized",ylab="Total Population Up To Date",col="green",border="blue",las=1,breaks=20)

**# Histogram of Total Number Of People Vaccinations Per Hundred.**

hist(vaccinations\_per\_country\_without\_na$people\_vaccinated\_per\_hundred,main="Total Number Of People Vaccinations Per Hundred",xlab="Population Immunized",ylab="Total Population Up To Date",col="green",border="blue",las=1,breaks=20)

**# People Fully Vaccinated Per Hundred with n/a.**

hist(vaccinations\_per\_country$people\_fully\_vaccinated\_per\_hundred,main="People Fully Vaccinated Per Hundred",xlab="Populationtion Fully Immunized",ylab="Total Population Up To Date",col="green",border="blue",las=1,breaks=20)

**# People Fully Vaccinated Per Hundred.**

hist(vaccinations\_per\_country\_without\_na$people\_fully\_vaccinated\_per\_hundred,main="People Fully Vaccinated Per Hundred",xlab="Populationtion Fully Immunized",ylab="Total Population Up To Date",col="green",border="blue",las=1,breaks=20)

hist(vaccinations\_per\_country$daily\_vaccinations\_per\_million,main="daily\_vaccinations\_per\_million",col="green",border="blue",las=1,breaks=30)

# **Histogram of tot vaccination per hundred.**

hist(vaccinations\_per\_country\_without\_na$daily\_vaccinations\_per\_million,main="daily\_vaccinations\_per\_million",col="green",border="blue",las=1,breaks=30)

**Finding the Mean, Median, Variance, and Standart Deviation.**

I have chose the following variables, wich are my columns: total\_vaccinations\_per\_hundred (this is for Total Number of People Vaccinated Per Hundred) and people\_vaccinated\_per\_hundred\_hist (this one is for Total Vaccinations per Hundred.)

**For Total Number of People Vaccinated Per Hundred (total\_vaccinations\_per\_hundred)**

**# Storing the numeric data in a variable.**

numeric\_values\_of\_total\_vaccinations\_per\_hundred<-vaccinations\_per\_country\_without\_na$total\_vaccinations\_per\_hundred

# **Calculate the mean.**

mean(numeric\_values\_of\_total\_vaccinations\_per\_hundred)

mean\_of\_total\_vaccinations\_per\_hundred<-mean(numeric\_values\_of\_total\_vaccinations\_per\_hundred)

mean\_of\_total\_vaccinations\_per\_hundred

>>> **39.99296**

**# Calculate the median**

median(numeric\_values\_of\_total\_vaccinations\_per\_hundred)

median\_of\_total\_vaccinations\_per\_hundred<-median(numeric\_values\_of\_total\_vaccinations\_per\_hundred)

median\_of\_total\_vaccinations\_per\_hundred

>>> **25.775**

**# Calculating the Variance**

var(numeric\_values\_of\_total\_vaccinations\_per\_hundred)

variance\_of\_total\_vaccinations\_per\_hundred<-var(numeric\_values\_of\_total\_vaccinations\_per\_hundred)

variance\_of\_total\_vaccinations\_per\_hundred

**>>> 1509.202**

**# Calculating the Standard Deviation.**

sd(numeric\_values\_of\_total\_vaccinations\_per\_hundred)

standard\_deviation\_of\_total\_vaccinations\_per\_hundred<-sd(numeric\_values\_of\_total\_vaccinations\_per\_hundred)

standard\_deviation\_of\_total\_vaccinations\_per\_hundred

>>> **38.84845**

**Mean = 39.99296, Median = 25.775, Variance = 1509.202, Standar Deviation = 38.84845.**

**For Total Vaccinations per Hundred(people\_vaccinated\_per\_hundred).**

**# Storing the numeric data in a variable.**

hundred<-vaccinations\_per\_country\_without\_na$people\_vaccinated\_per\_hundred

# **Calculate the mean.**

mean(numeric\_values\_of\_total\_number\_of\_people\_vaccinated\_per\_hundred)

mean\_of\_numeric\_values\_of\_total\_number\_of\_people\_vaccinated\_per\_hundred<-mean(numeric\_values\_of\_total\_number\_of\_people\_vaccinated\_per\_hundred)

mean\_of\_numeric\_values\_of\_total\_number\_of\_people\_vaccinated\_per\_hundred

**>>> 25.09553**

**# Calculate the median**

median(numeric\_values\_of\_total\_number\_of\_people\_vaccinated\_per\_hundred)

median\_of\_numeric\_values\_of\_total\_number\_of\_people\_vaccinated\_per\_hundred<-median(numeric\_values\_of\_total\_number\_of\_people\_vaccinated\_per\_hundred)

median\_of\_numeric\_values\_of\_total\_number\_of\_people\_vaccinated\_per\_hundred

**>>> 17.75**

**# Calculating the Variance**

var(numeric\_values\_of\_total\_number\_of\_people\_vaccinated\_per\_hundred)

variance\_of\_numeric\_values\_of\_total\_number\_of\_people\_vaccinated\_per\_hundred<-var(numeric\_values\_of\_total\_number\_of\_people\_vaccinated\_per\_hundred)

variance\_of\_numeric\_values\_of\_total\_number\_of\_people\_vaccinated\_per\_hundred

**>>> 487.9403**

**# Calculating the Standard Deviation.**

sd(numeric\_values\_of\_total\_number\_of\_people\_vaccinated\_per\_hundred)

standard\_deviation\_of\_numeric\_values\_of\_total\_number\_of\_people\_vaccinated\_per\_hundred<-sd(numeric\_values\_of\_total\_number\_of\_people\_vaccinated\_per\_hundred)

standard\_deviation\_of\_numeric\_values\_of\_total\_number\_of\_people\_vaccinated\_per\_hundred

**>>> 22.08937**

**Mean = 25.09553, Median = 17.75, Variance = 487.9403, Standar Deviation = 22.08937.**