“Homework3” Justin Minsk

bumpers <-scan("http://math.mercyhurst.edu/~sousley/STAT\_139/data/bumpers.vec")

normtemp<-read.csv("http://math.mercyhurst.edu/~sousley/STAT\_139/data/normtemp.csv", header=T)

firstchi<-scan("http://math.mercyhurst.edu/~sousley/STAT\_139/data/firstchi.vec")

pi2000<-scan("http://math.mercyhurst.edu/~sousley/STAT\_139/data/pi2000.vec")

paradise<-scan("http://math.mercyhurst.edu/~sousley/STAT\_139/data/paradise.vec")

# 2.31

hist(bumpers, main = 'Bumpers Histogram', col=c("yellow"))

# mean = 2000

# median = 2100

# std = 100

mean(bumpers)

# 2122.478

median(bumpers)

# 2129

sd(bumpers)

# 798.4574

hist(normtemp$temperature, main = 'Normal Temperature Histogram', col=c("red"))

# mean = 100

# median = 100

# std = 2

mean(normtemp$temperature)

# 98.24923

median(normtemp$temperature)

# 98.3

sd(normtemp$temperature)

# 0.7331832

hist(firstchi, main = 'First Child Histogram', col=c("black"))

# mean = 22.5

# median 21

# std = 2

mean(firstchi)

# 23.97701

median(firstchi)

# 23

sd(firstchi)

# 6.254258

# 2.32

hist(pi2000, main="Histogram of the First 2000 Digits of PI", col=c("brown"))

hist(pi2000, main="Histogram of the First 2000 Digits of PI", breaks= 0:10-.5, col=c("brown"))

# changing bins can allow you to see better if the data is skewed or not but be warned

# it can trick you either way.

# 2.33

hist(normtemp$temperature, main = 'Normal Temperature in 130 Humans Histogram', col=c("red"))

# mean = 100

mean(normtemp$temperature)

# 98.24923

# 2.36

paradise <- as.numeric(paradise)

paradise <- paradise[!is.na(paradise)]

hist(paradise, main="Histogram of the Dataset Paradise", col=c("orange"))

# it is a little skewed right but pretty close to norm dist

#3.5

boxplot(bumpers, main = 'Bumpers Boxplot', col=c("yellow"))

# simlar to the histogram

boxplot(normtemp$temperature, main = 'Normal Temperature Boxplot', col=c("red"))

# shwows three outliears compared to histogram

boxplot(firstchi, main = 'First Child Boxplot', col=c("black"))

# lots of hisgh outliears (black is a bad color)

boxplot(pi2000, main="Boxplot of the First 2000 Digits of PI", col=c("brown"))

# makes teh data look more norm dist

boxplot(paradise, main="Boxplot of the Dataset Paradise", col=c("orange"))

# shows a right tailed data

# 3.6

boxplot(bumpers, main = 'Bumpers Boxplot', col=c("yellow"))

stripchart(bumpers, vertical=T, add=T)

# makes the data look more skewed higher

boxplot(pi2000, main="Boxplot of the First 2000 Digits of PI", col=c("brown"))

stripchart(pi2000, vertical=T, method="jitter", add=T)

# makes every number look about the same in count