**Code**

x<-c(5, 10, 15, 20, 25, 30)

y<-c(-1, NA, 75, 3, 5, 8)

z<-c(5)

violin=c(x\*z)

cello=c(y\*z)

print(violin)

print(cello)

y<-ifelse(test = is.na(y)==T, yes = 2.5, no = y)

print(y)

symphony<-read.csv("https://raw.githubusercontent.com/mattdemography/EDU\_7043/master/Data/Assignment\_1.csv" )

symphony[1:10,1]

mean(symphony[1:51,3])

median(symphony[1:51,3])

copy=symphony

subcopy=subset(copy,State=="CT"|State=="MA"|State=="ME"|State=="NH"|State=="RI"|State=="VT")

mean(subcopy[1:6,3])

copy<-ifelse(test = is.na(copy$Vcrime)== T, yes = 555, no = copy$Vcrime)

mean(copy$Vcrime)

**Results**

> x<-c(5, 10, 15, 20, 25, 30)

> y<-c(-1, NA, 75, 3, 5, 8)

> z<-c(5)

> violin=c(x\*z)

> cello=c(y\*z)

> print(violin)

[1] 25 50 75 100 125 150

> print(cello)

[1] -5 NA 375 15 25 40

> y<-ifelse(test = is.na(y)==T, yes = 2.5, no = y)

> print(y)

[1] -1.0 2.5 75.0 3.0 5.0 8.0

> symphony<-read.csv("https://raw.githubusercontent.com/mattdemography/EDU\_7043/master/Data/Assignment\_1.csv" )

> symphony[1:10,1]

[1] AK AL AR AZ CA CO CT DE FL GA

51 Levels: AK AL AR AZ CA CO CT DC DE FL GA HI IA ID IL IN KS KY LA MA MD ME MI MN MO MS MT NC ND NE NH NJ NM NV ... WY

> mean(symphony[1:51,3])

[1] 8.727451

> median(symphony[1:51,3])

[1] 6.8

> copy=symphony

> subcopy=subset(copy,State=="CT"|State=="MA"|State=="ME"|State=="NH"|State=="RI"|State=="VT")

> mean(subcopy[1:6,3])

[1] 3.55

> copy<-ifelse(test = is.na(copy$Vcrime)== T, yes = 555, no = copy$Vcrime)

> mean(copy$Vcrime)

Error in copy$Vcrime : $ operator is invalid for atomic vectors