R Assignment 2

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1. Import the **Demographics** data file (csv format) into a data frame (table) and label it myData. Keep in mind that The R language is case sensitive.

# Replace Your with your name and " " with your file location.   
  
myData <- read.csv("./data/Demographics.csv")  
  
# View(myData)

1. Count the number of males and females in the data.

length(which(myData$Sex=='M'))

## [1] 508

length(which(myData$Sex=='F'))

## [1] 382

1. What percentages of males and females are married?

length(which(myData$Sex=='M' & myData$Married=='Y'))/length(which(myData$Sex=='M'))

## [1] 0.6614173

length(which(myData$Sex=='F' & myData$Married=='Y'))/length(which(myData$Sex=='F'))

## [1] 0.6492147

1. Of the 10 individuals with the highest income, how many are married males.

df2 <- myData[order(-myData$Income),]  
df2 <- df2[1:10,]  
length(which(df2$Married=='Y' & df2$Sex=='M'))

## [1] 7

1. What are the highest and the lowest incomes of males and females?

library(dplyr)  
# lowest and highest income for males:  
min(filter(myData, myData$Sex=='M')$Income)

## [1] 35

max(filter(myData, myData$Sex=='M')$Income)

## [1] 147

# lowest and highest income for females  
min(filter(myData, myData$Sex=='F')$Income)

## [1] 22

max(filter(myData, myData$Sex=='F')$Income)

## [1] 138

1. What are the highest and lowest incomes of married and unmarried males?

# "lowest and highest income for Unmarried males:"  
min(filter(myData, Sex=='M', Married=='N')$Income)

## [1] 39

max(filter(myData, Sex=='M', Married=='N')$Income)

## [1] 140

# lowest and highest income for married males:  
min(filter(myData, Sex=='M', Married=='Y')$Income)

## [1] 35

max(filter(myData, Sex=='M', Married=='Y')$Income)

## [1] 147