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title: "Stat123_lab3"
author: "Koki Itagaki"
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output: html_document

#1. Download the data set inflation_consumer.csv posted under Lab Content in Brightspace (under Lab 3) and save it to whatever directory you are using for this course.

```{r}
#(a) Read the inflation_consumer file into R and call it Inflation.df.
Inflation.df<-read.csv("/Users/itagakikouki/stat123/inflation_consumer.csv")


#(b) How many observations (rows) are in this dataset? How many variables (columns)?
  #nrow(Inflation.df)
  #ncol(Inflation.df)
  dim(Inflation.df)
#(c) What are the mean values for the Year column?
  head(Inflation.df,100)
  mean(Inflation.df$Year)
#(d) Determine which country has the lowest Inflation and print out their name.
  minIn<-min(Inflation.df$Inflation)
 min_country<-Inflation.df[Inflation.df$Inflation == minIn,"Country"]
 min_country
#(e) Determine which country has the highest Inflation and print out the year.
 max_in<-max(Inflation.df$Inflation)
 max_country<-Inflation.df[Inflation.df$Inflation == max_in, "Year"]
 max_country



```

#2. Create a new dataframe that contains all countries with inflation over 7.00 and save it to Sub_Inflation.

```{r}

Sub_Inflation<-Inflation.df[Inflation.df$Inflation > 7.00,]



#(a) Determine the average of the inflation column and save this to a variable called avg.inflation.
avg.inflation<-mean(Sub_Inflation$Inflation)
avg.inflation
#(b) Determine the number of countries with Inflation over that 15.00, using Sub_Inflation, and print out the value.
Sub_Inflation["Inflation"][Sub_Inflation["Inflation"] > 15.00 ] <- "High_Inflation"
length(Sub_Inflation["Inflation"] == "High_Inflation")

#(c) Create a vector named Inflation_Status which contains two levels: High_Inflation and Low_Inflation.All countries in Sub_Inflation with inflation over than 15.00 should be labeled as High_Inflation, otherwise named as low_Inflation.
Sub_Inflation["Inflation"][Sub_Inflation["Inflation"] != "High_Inflation"]<-
"low_Inflation"
Inflation_Status<-as.vector(Sub_Inflation["Inflation"])
Inflation_Status
```

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