Lab 3: Data Structures in R

The following worksheet is due by 8 pm Wednesday February 1st. You can find the submission dropbox in Brightspace by clicking on Content − > Lab Content.

0. Open a new R Markdown file.

Note: Your worksheet is to be submitted as an R Markdown file (you can knit it to HTML and then convert it to PDF, or you can knit it to PDF if you have LaTeX on your computer, or you can knit it to Word and then convert that to a PDF).

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.

(a) Read the inflation_consumer file into R and call it Inflation.df.

(b) How many observations (rows) are in this dataset? How many variables (columns)?

(c) What are the mean values for the Year column?

(d) Determine which country has the lowest Inflation and print out their name.

(e) Determine which country has the highest Inflation and print out the year.

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

(a) Determine the average of the inflation column and save this to a variable called avg.inflation.

(b) Determine the number of countries with Inflation over that 15.00, using Sub_Inflation, and print out the value.

(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.