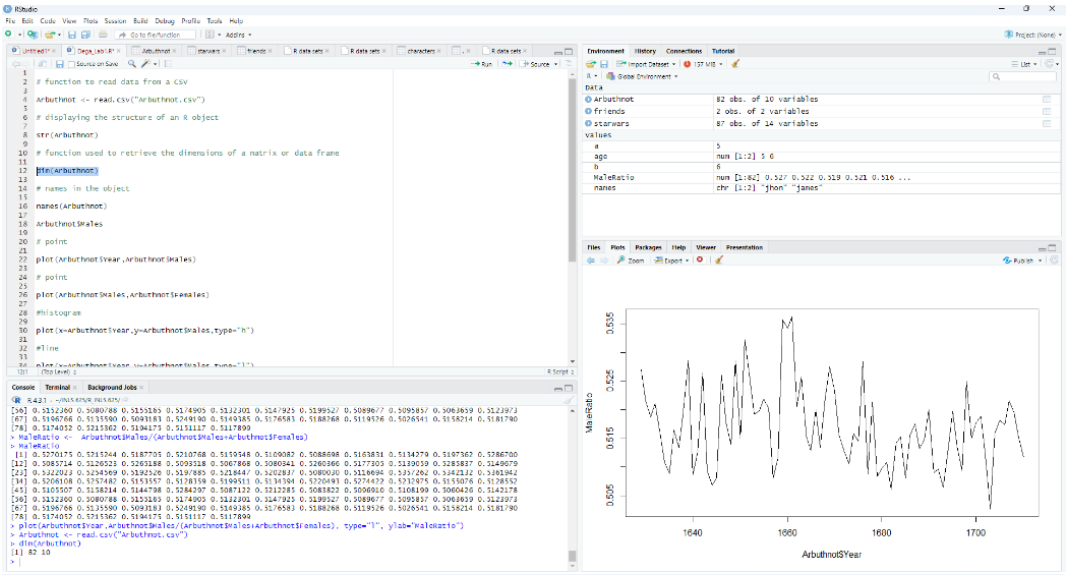
Dega – Lab01.Report, INLS 625

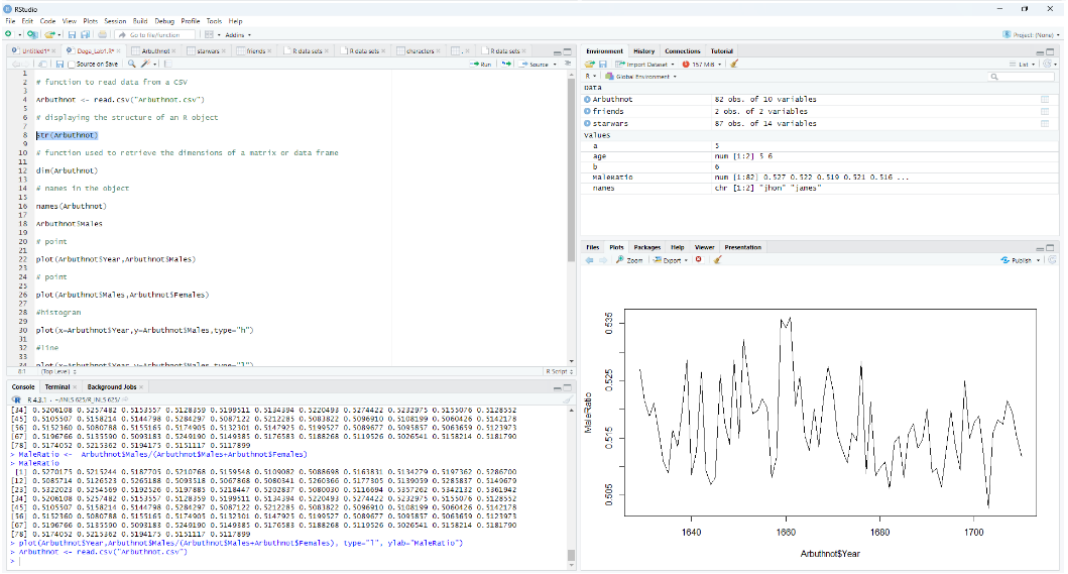
Mini Lab Report: Analyzing Demographic Data using R.

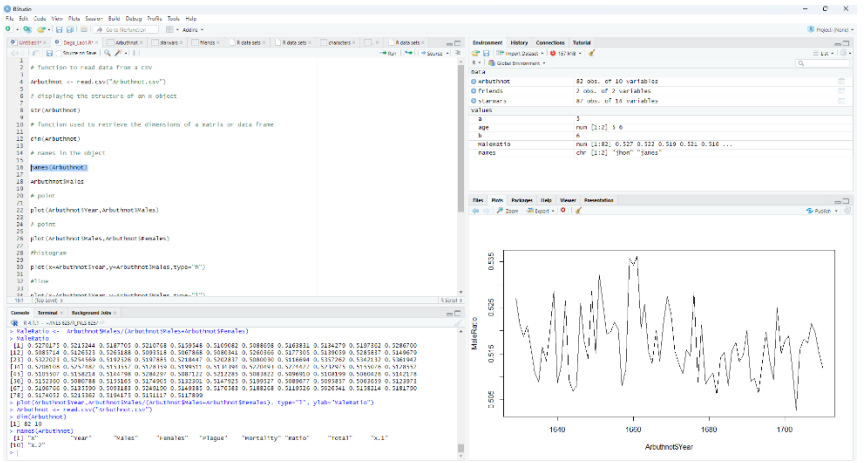
I'll use the R programming language to examine a demographic dataset in this short lab report. The dataset includes details on the male and female populations over time. My objective is to carry out fundamental data analysis procedures like computing proportions, creating plots, and comprehending trends.

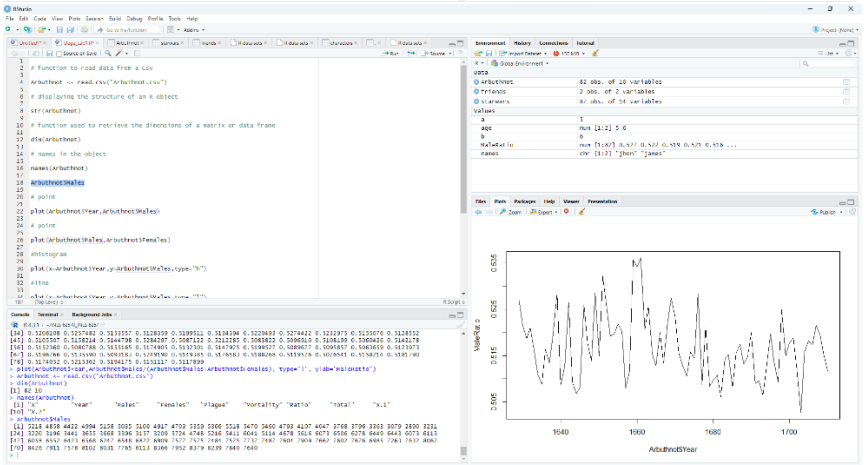
Step 1: Data loading and overview

I began by using R's read.csv () function to load the dataset "Arbuthnot.csv." The dataset consists of numerous columns that represent different demographic characteristics, such as years, populations of men and women, and other measurements.



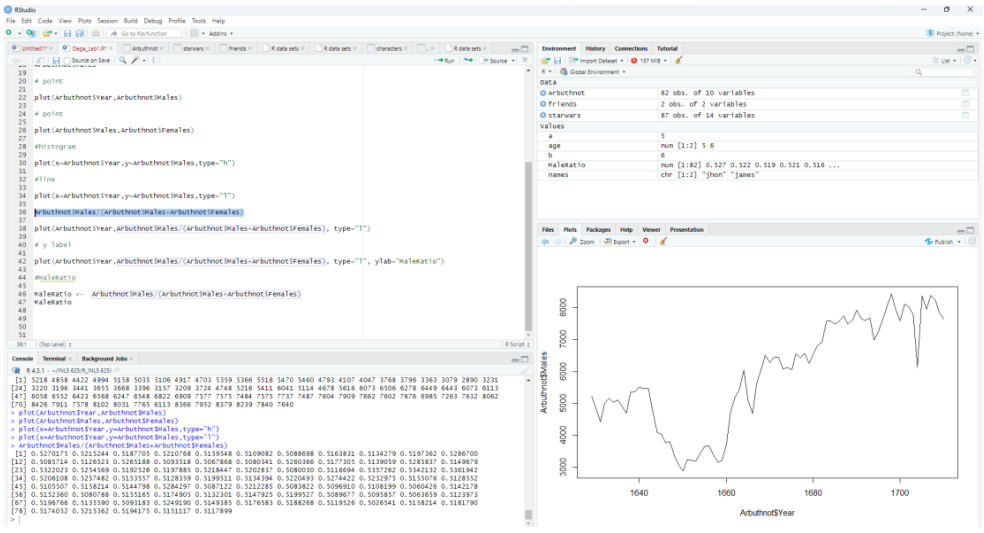






Step 2: Data Analysis and Visualization

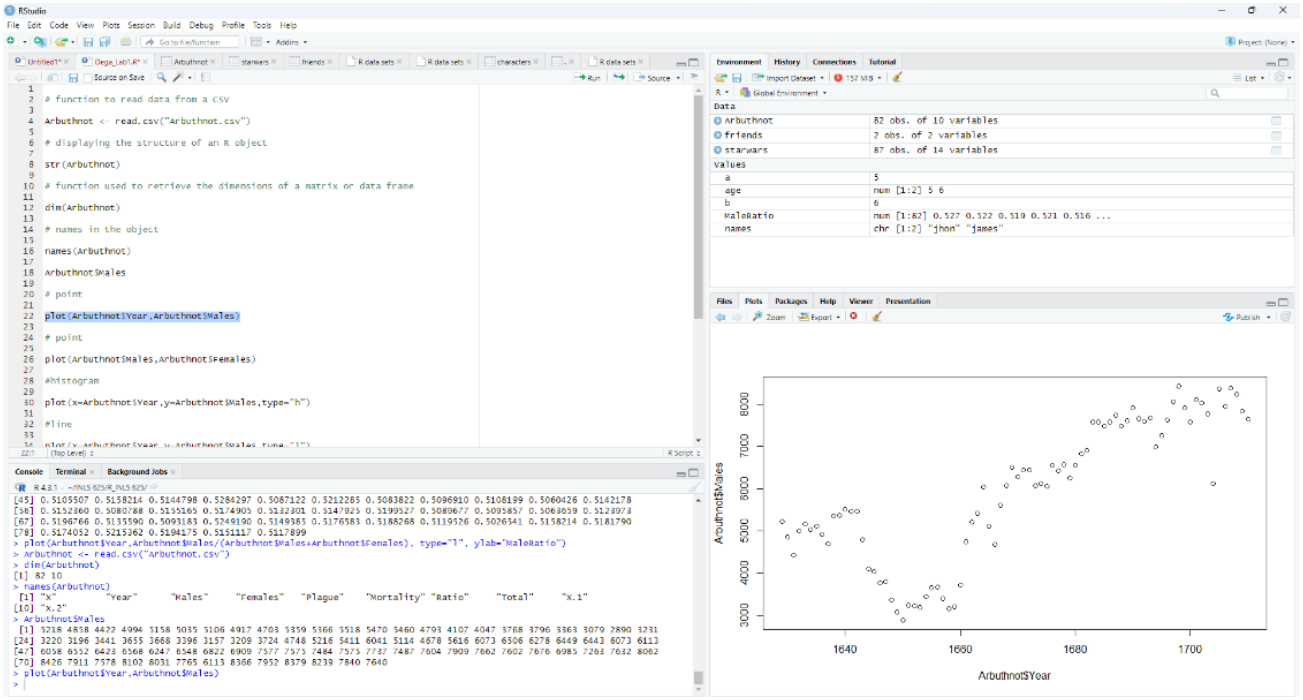
Calculating Male Ratio:

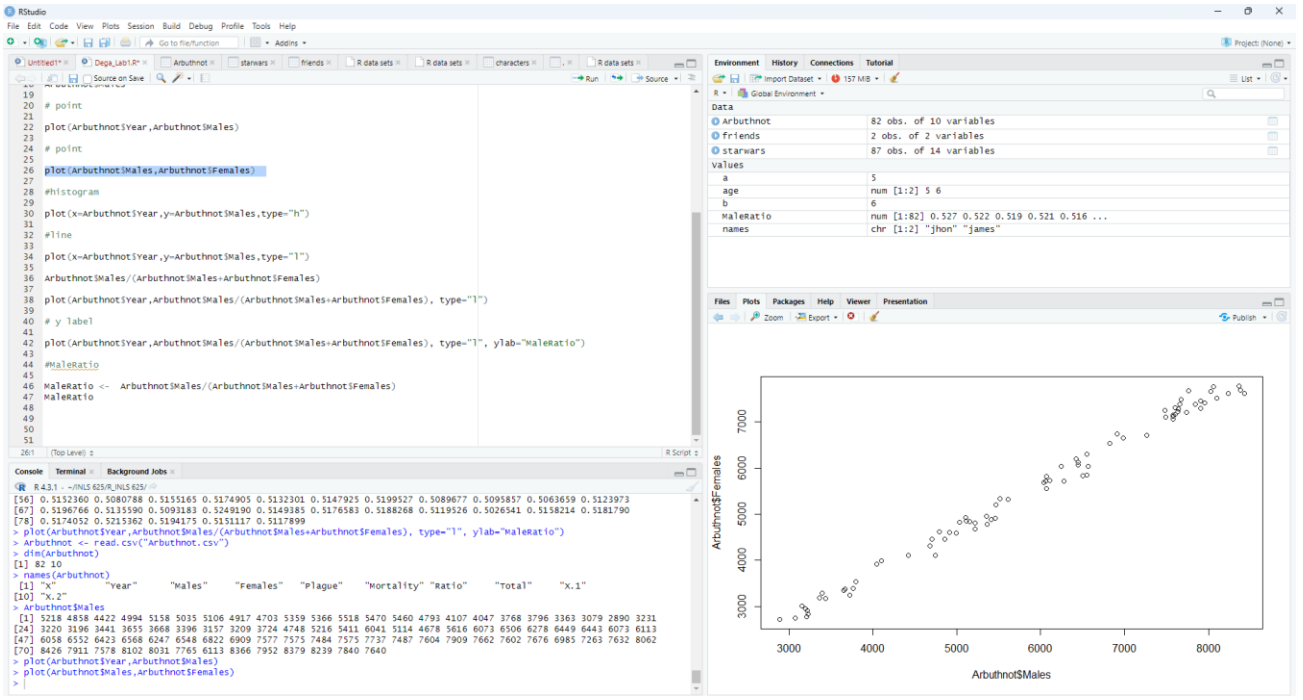


I calculated the ratio of males to the total population (males + females) for each row using the formula: **Arbuthnot$Males / (Arbuthnot$Males + Arbuthnot$Females).** This helped me understand the proportion of males in each year.

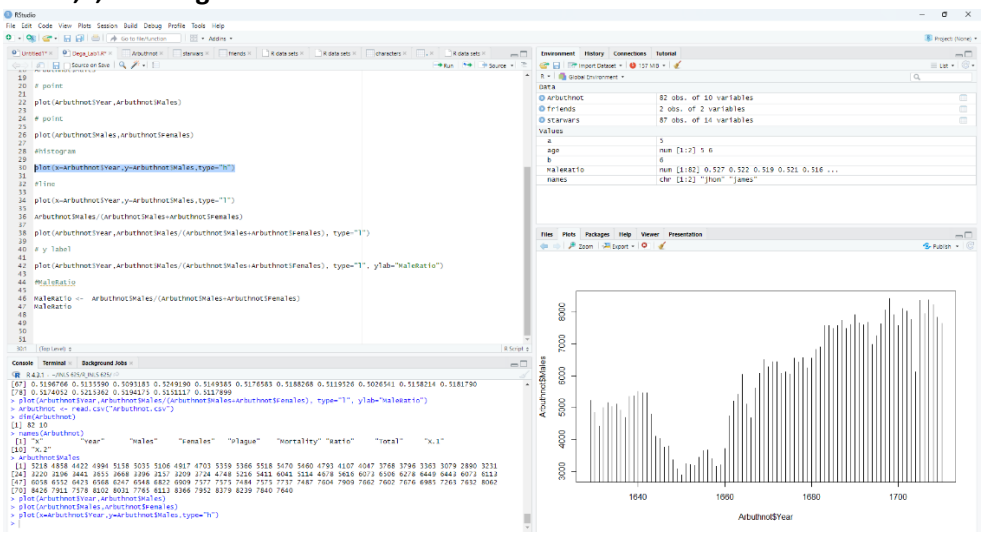
I'll demonstrate various visualizations made with the R programming language to examine a dataset of demographic data. The dataset includes data on male and female populations over a range of years. The goal is to visually explore the dataset using various plots to learn about population trends.

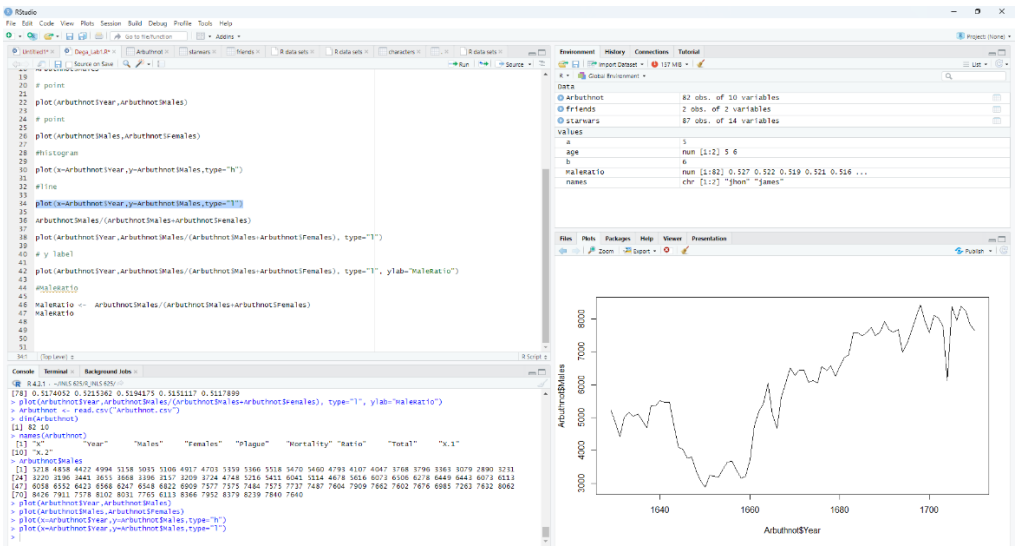
Plot 1,2: Scatter Plots

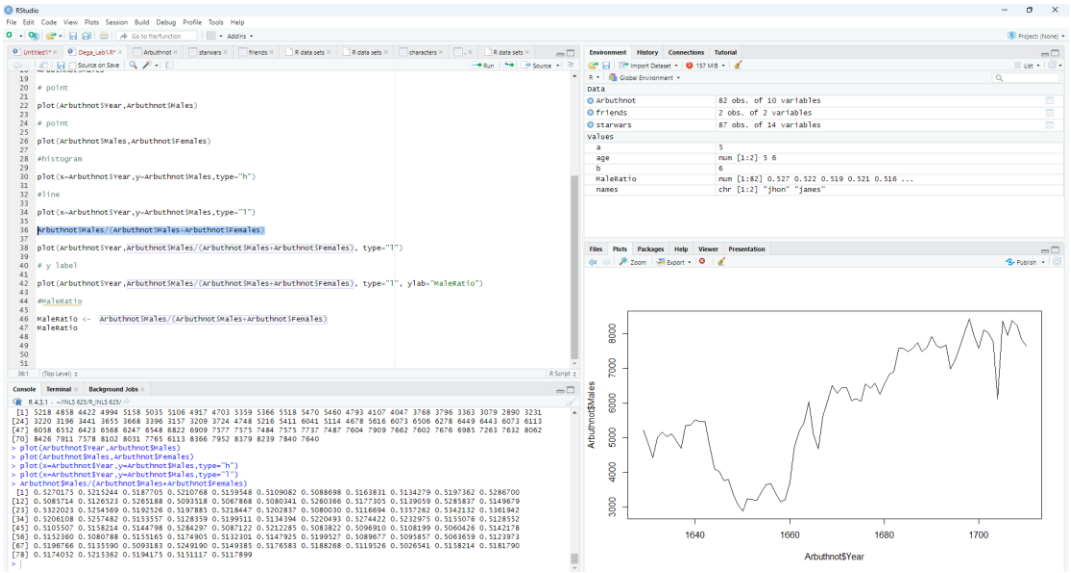




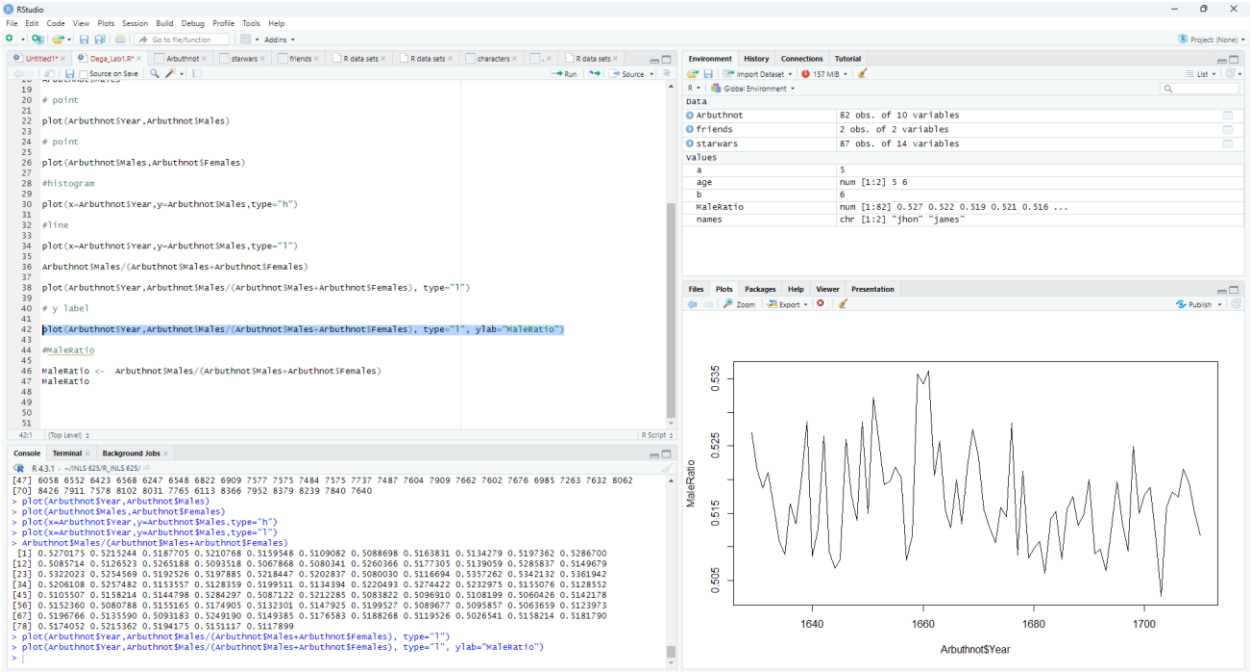
Plot 2,3,4: Histogram and Line Plots.



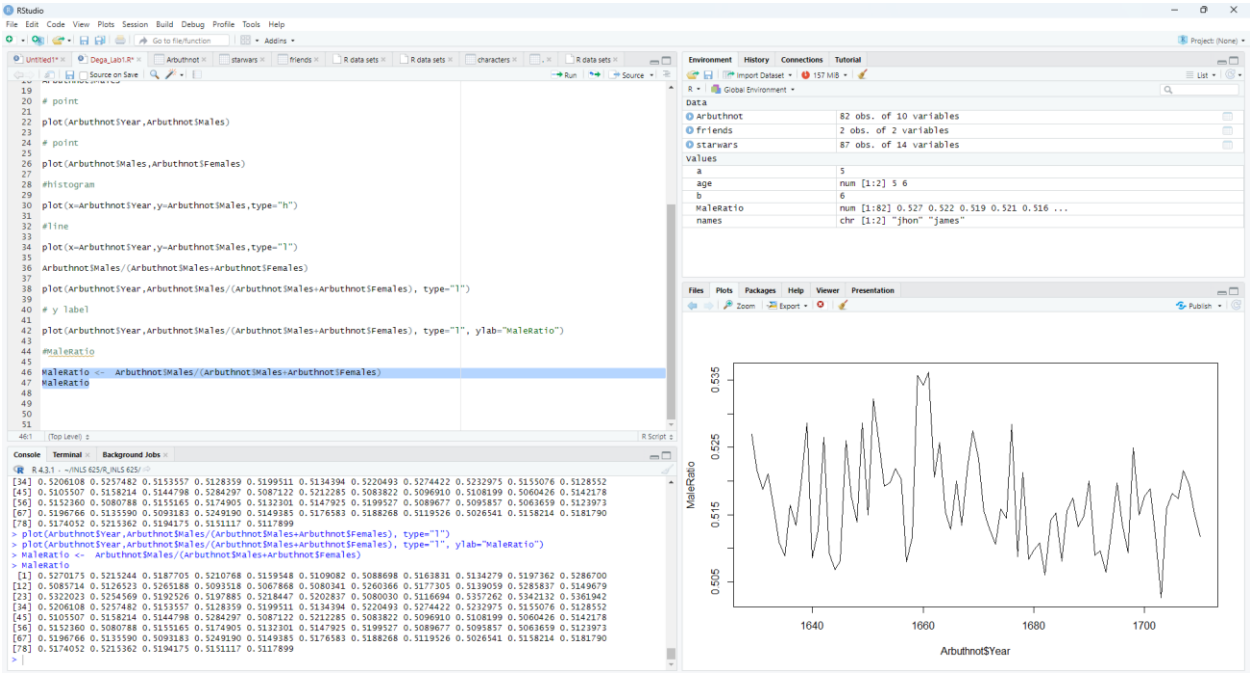




Y-Label.



Assigning Male Ratio-Variable.



Conclusion:

In conclusion, I learned about the trends in gender distribution over time through this brief lab exercise. I was able to see the changing male ratio over time through the line plot. I was able to analyze the dataset efficiently and visually communicate my findings by using R for data analysis and visualization.