Name:

**Project 1**

To answer the following questions, you need to find two variables with monthly or quarterly frequency. You should have at least 60 observations per variable. The variables should be related to each other. You can use the following links to get the data: <https://fred.stlouisfed.org/> , <https://www.bls.gov/> , <https://www.census.gov/>

1. Please identify the two variables you have chosen. Show the series graphically. Show the autocorrelation coefficients for the two series. Looking at the autocorrelation plots, do you think the original series have any trend, seasonal pattern, or cyclical pattern?
2. Estimate the four simple forecasting models to forecast the next period values for both variables:
3. Naïve Method
4. Drift Method
5. Average Method
6. Seasonal Naïve Method
7. For each variable, which model produces forecasts that are more reliable? Please explain how you arrived at the conclusion for choosing the right model.

(Please show your code and output from R when answering the questions)