CSUN Econ 433 Week 3 Problem Set

**Government policy as a coordinating mechanism**.

Consider the following game between two drivers going in opposite directions down a road. Driver 1 is going north and driver 2 is going south. Each driver can choose to drive on the right-hand side of the road or on the left-hand side.

If both drivers drive on their right-hand side, or both on their left-hand side, the drivers will not crash. If one drives on their right-hand side while the other drives on their left-hand side, they will crash.

Neither driver has a preference for which side of the road to drive on, as long as they don’t crash.

1. Represent the normal form of this game and find the Nash equilibria. How many Nash equilibria are there?
2. In real life, how do drivers know which side of the road to drive on?
3. What do you think would happen if there was no law dictating which side of the road to drive on?

The following questions pertain to Lab 3.

1. Write down the formula to calculate the weighted mean of:  
   where   
   are the weights.
2. You have a dataframe, df, with the variable EMPSTAT. Write down a command to select only the employed people from the data.
3. You have a dataframe, df, with the variables SEX, EMPSTAT, and PERWT. Write down a command to calculate the employment rate by sex using this dataframe.

Complete the Lab 3 Assignment, then answer the following question.

1. What was the average income of employed individuals in Los Angeles County in 2019? (Los Angeles County has a COUTYFIP code of 37).