Ec5070 Decision Theory and Behavior
Problem Set 1.

From Chp 1 of MasColell   1.B.1, 1.B.2, 1.B.3, 1.B.4 and 1.B.5

1. When you go to Cafe Jules, you do not always pick the same items. Is this consistent with the model of rational choice we saw in class? If not, write down two different extensions of that model which can account for the instability of your choice from Cafe Jules.

2. Suppose that you have three transportation options to going to London: car, train and bus. The train is not fast, but it runs often and is comfortable. The bus is not comfortable, but it runs often and is fast. Car rides do not go often, but they are fast and comfortable. So you prefer the train to the bus, the bus to the car, and the car to the train. Is this a rational choice pattern – why/why not? Can you find an intuition behind this choice pattern, and how does it relate to the models we saw in class?

3. Sport competitions are designed to find the best team (individual) out of a group of competing teams (individuals). The organization of a competition is an algorithm of choice, the choice of the champion. Think to the following two examples: 1) football world cup tournaments, which include various stage groups; 2) Tennis Wimbledon championships, direct elimination.   Consider the following binary relation: x>y if team x plays team y and wins.

   1. For each example. Looking at the results, is the revealed preference relation a rational one?
   2. For each example. The results can be induced by a rational preference relation?