CSCI   6350   Spring 2006   Name _____
Homework 7 (due beginning of class, Tuesday, March 14th)

We have collected a data set of 15 data objects (shown below) that will help us determine whether any particular day will be a good day or a bad day to work. The three attributes chosen for describing each day are :
1. day of the week (Monday, midweek, or weekend),
2. workload (low, or high)
3. weather (sunny, or rain).

Construct a **Naïve Bayes classifier** to determine whether a day (Day=Monday, workload = high, weather=rain) is a good day or a bad day to work. Show all computations involved.

Data:

Object	Day	Workload	Weather	Class
X1	midweek	low	rain	good
X2	midweek	high	sunny	bad
X3	Monday	low	rain	good
X4	midweek	low	rain	good
X5	weekend	high	rain	good
X6	midweek	high	sunny	bad
X7	Monday	high	sunny	bad
X8	midweek	low	rain	good
X9	weekend	high	rain	good
X10	weekend	high	rain	good
X11	midweek	high	rain	bad
X12	weekend	low	rain	bad
X13	Monday	high	sunny	bad
X14	weekend	low	sunny	good
X15	Monday	low	rain	good