Connor White

Question 1:

testData.txt

```
100000,500
200000,1000
500000,2000
150000,800
300000,1700
```

Question 2:

```
#code used to extract price and sqrfoot in the csv file
def readAndSetUpTrainingValuesCSV(fileName):
    inFile = open(fileName, "r")
    xList = []
    yList = []
    m = 0
    for line in inFile:
        if (m != 0):
            items = line.split(",")
            xList.append(float(items[1]))
            yList.append(float(items[4]))
        m += 1
    m = m - 1
    return xList, yList, m
```

Question 3:

I am assuming ULR will work decently well for predicting housing prices based on square footage. This is because it is most likely somewhat linear, so a single paramater ULR hopefully will fit the data mostly correctly.

Question 4:

```
Iters=      0 prevJCost=-0.0000000000 currentJCost=-0.0000000000 diff=0.0000000000

Theta0= 0.00000000000000000   Theta1= 0.00000000000000000
```

For alpha 0.000000000001 with 1 iterations and threshold 0.00000000001 took 0.0000911 seconds

Question 5:

To increase the performance of the prediction would most likely be by adding more paramters to make the regression polynomial, meaning the best fit line could bend with the graph more.