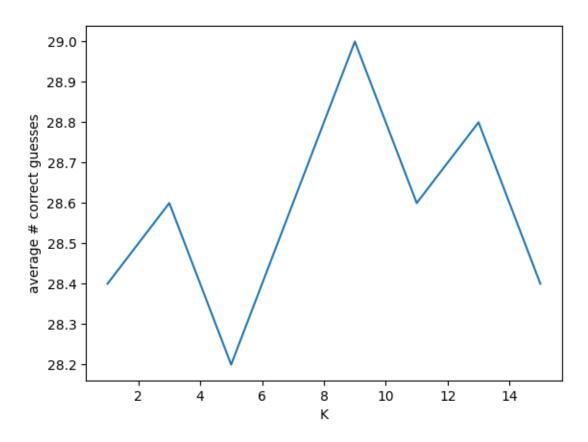
1b: feature matrix is (501x1)

2a:



I would choose k=9 as it gives the highest amount of correct predictions. However this k is not robust enough to use on other datasets. As K is dependent on the number of features, and we have a small training set for this example.

3b: testing accuracy = 0.84, training accuracy = 0.936

I expected the training accuracy to be a bit higher, but based on the size of the dataset I am happy with the training and testing accuracy