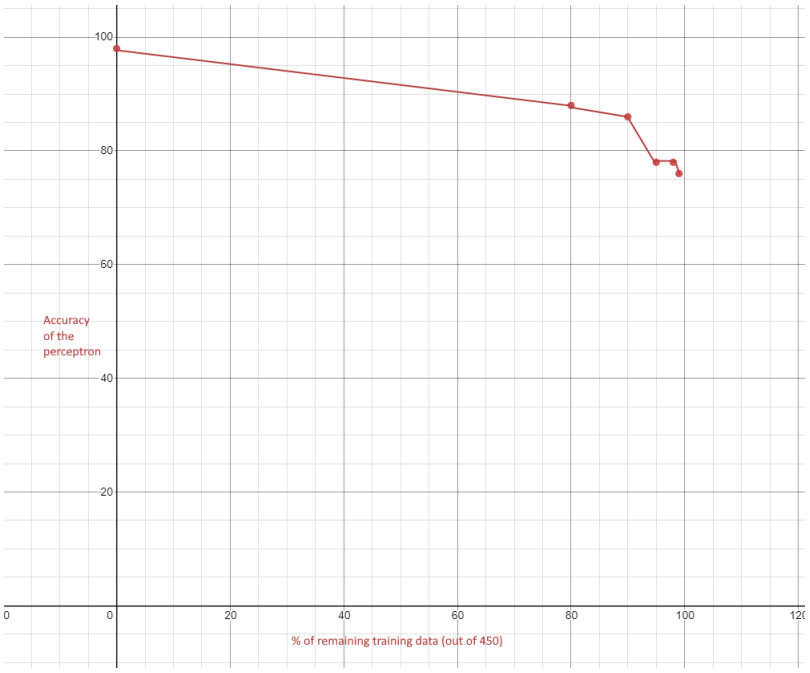
Problem 1 Report

This is the accuracy I got when using the given percentages of training data:
1%(5 instances) = 76% accuracy
2%(10 instances) = 78% accuracy
5%(23 instances) = 78% accuracy
10%(45 instances) = 86% accuracy
20%(90 instances) = 88% accuracy
100%(450 instances) = 98% accuracy



Problem 2 Report

For testing the kNN classifier I used 10% of the training data for testing. Since that means 4 instances as testing I took 1 from each of the labels {1,2,3,4}. As I increase the value of k these are the accuracies that I got. as k increases the

k	Accuracy
1	4/4
2	2/4
3	4/4
4	3/4
5	3/4
6	3/4
7	3/4
8	2/4
9	2/4

accuracy slowly decreases as well.