

Jonathan Kaneshiro

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CS 171 Assignment 1

Late days: 1

Total Late days used: 2

6/7/2018

Question 1

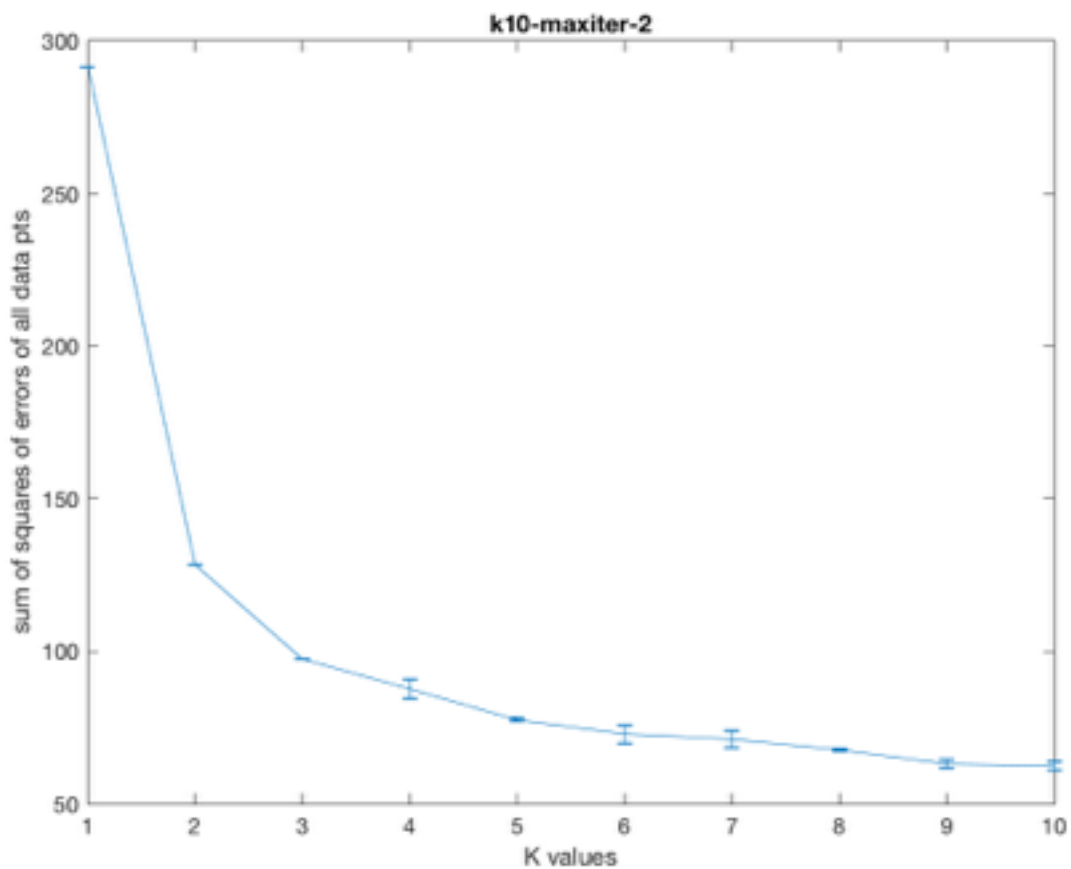
When $K = 3$, the sum of squares errors between all data points and their respective centroid is 102.934319489546.

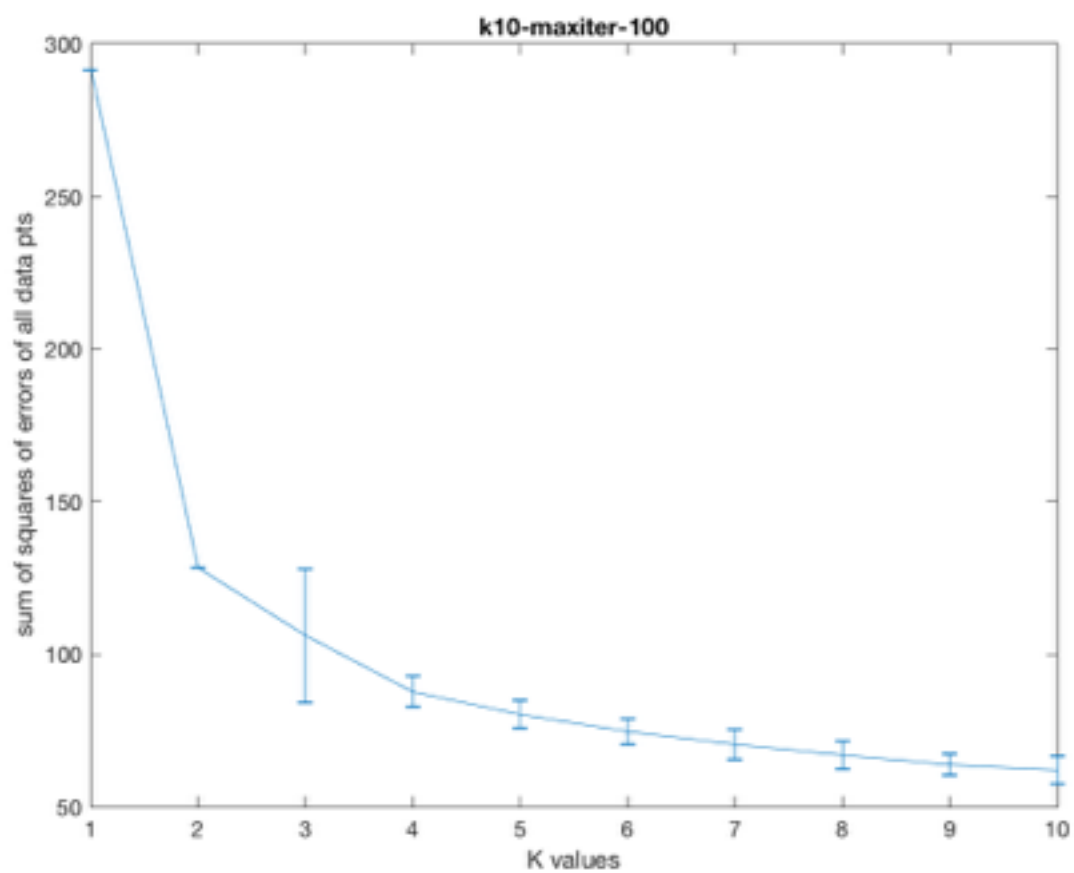
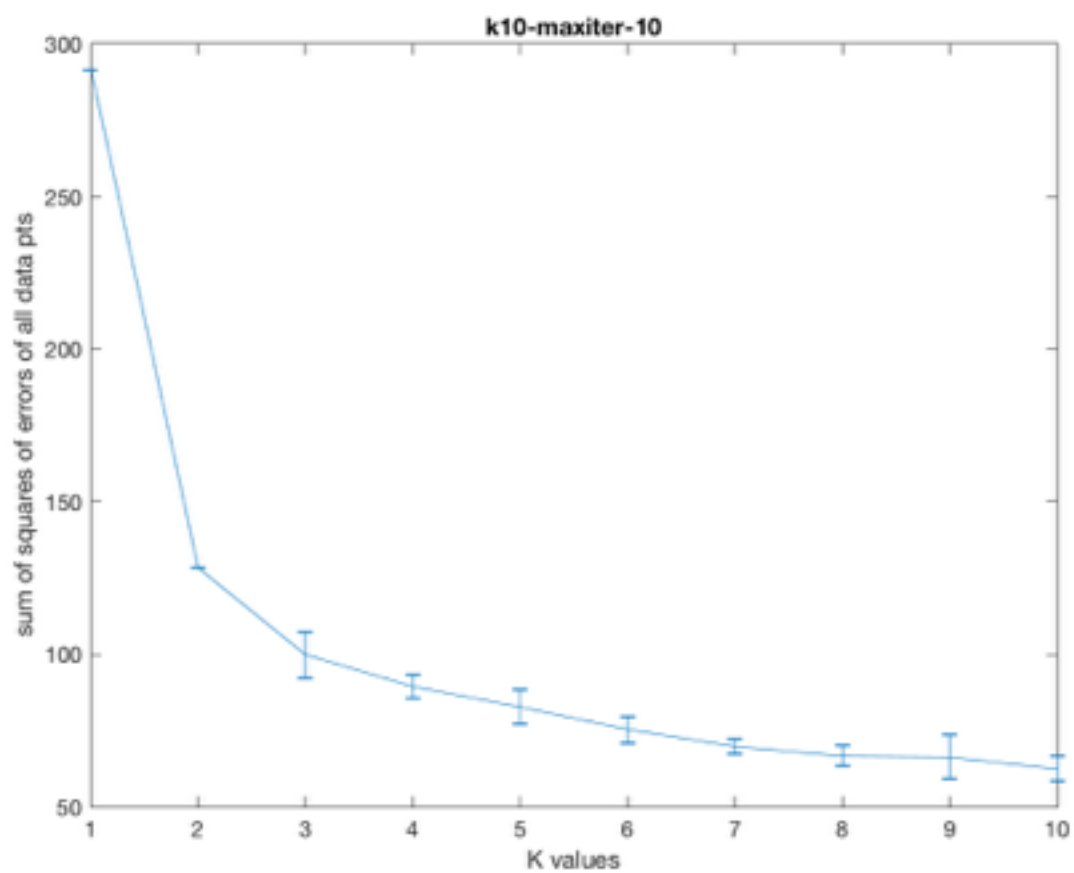
Question 2

1) At which K does the “knee” appear? Does it agree with the number of classes in the iris dataset?

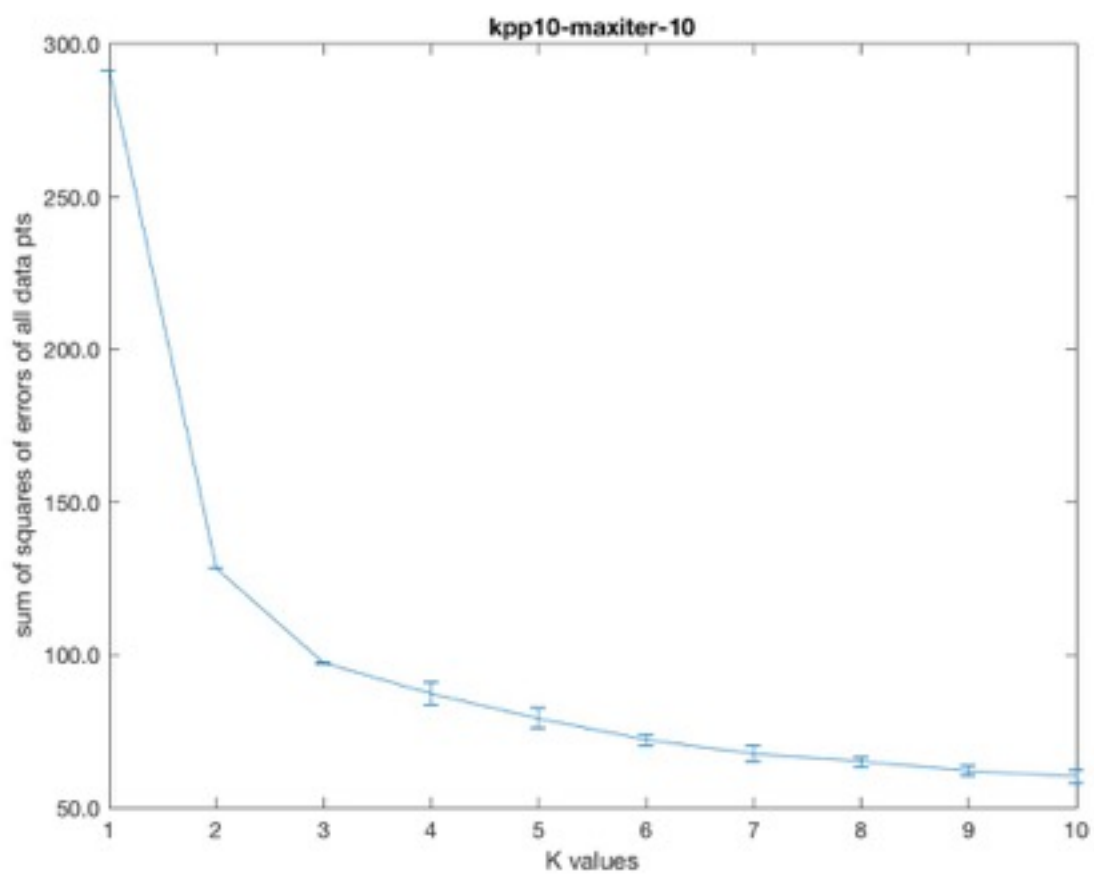
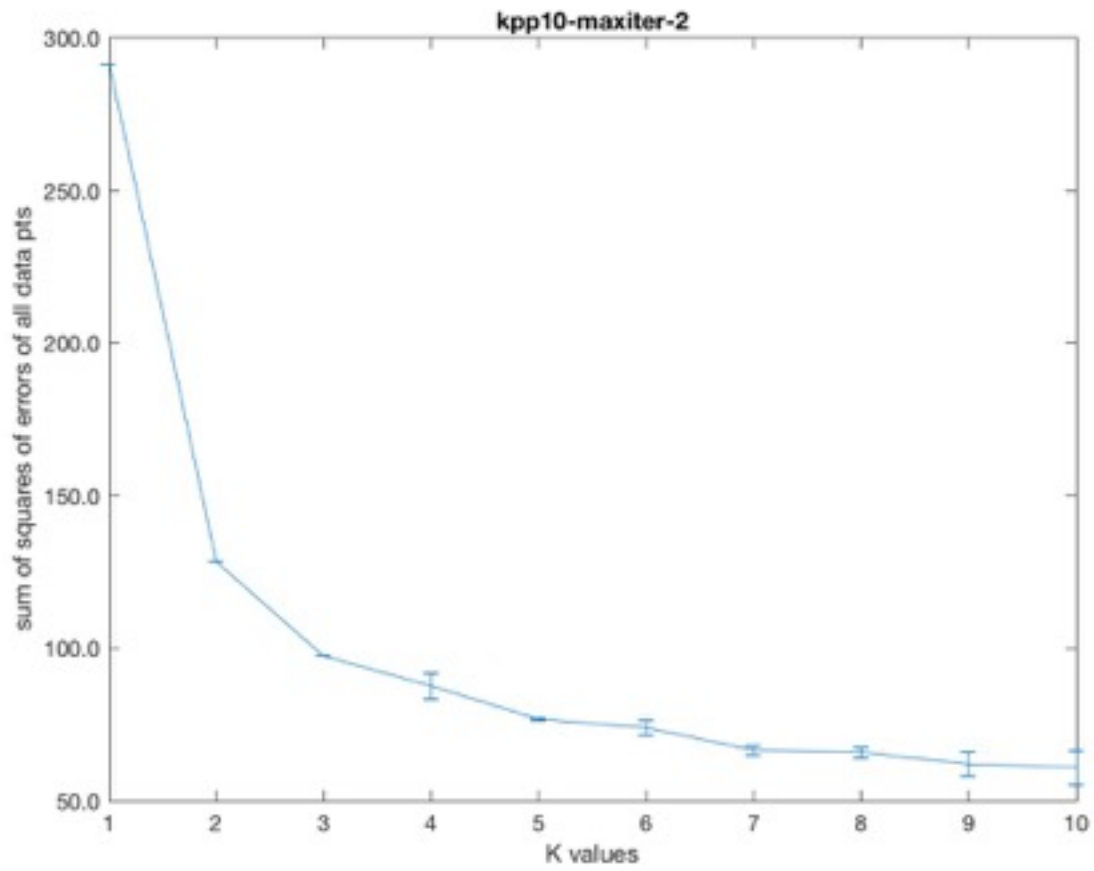
The knee appears to be in between 2 and 3. It more closely resembles 3 classes such as the iris dataset.

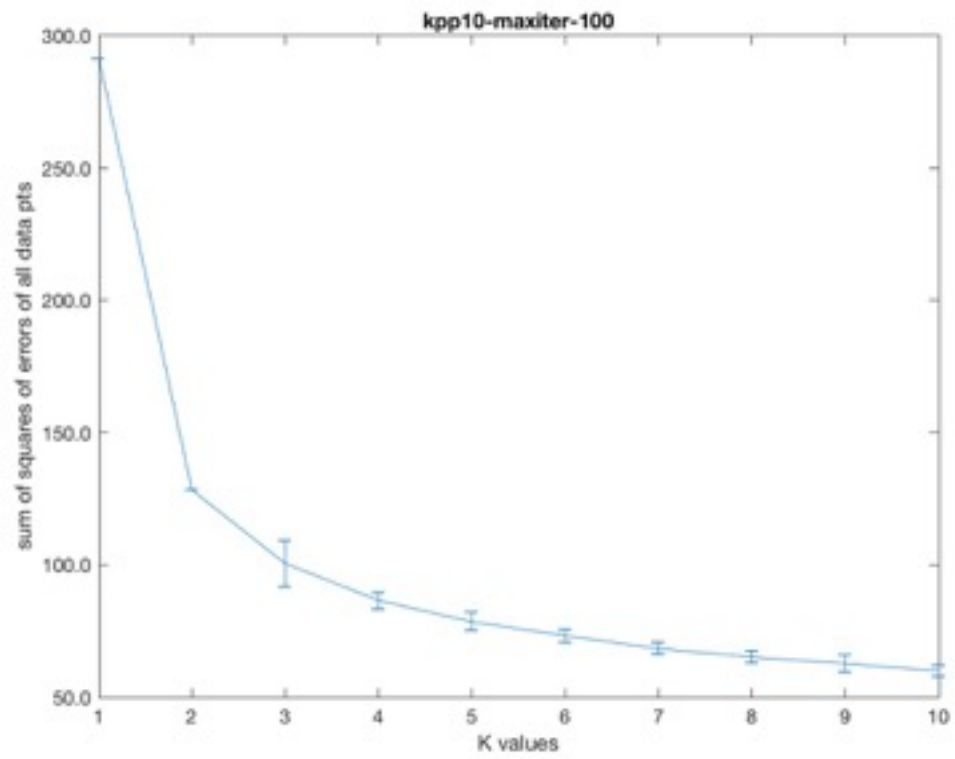
2)





Extra Credit





There are smaller error bars across the k values and the line graph looks more smooth.