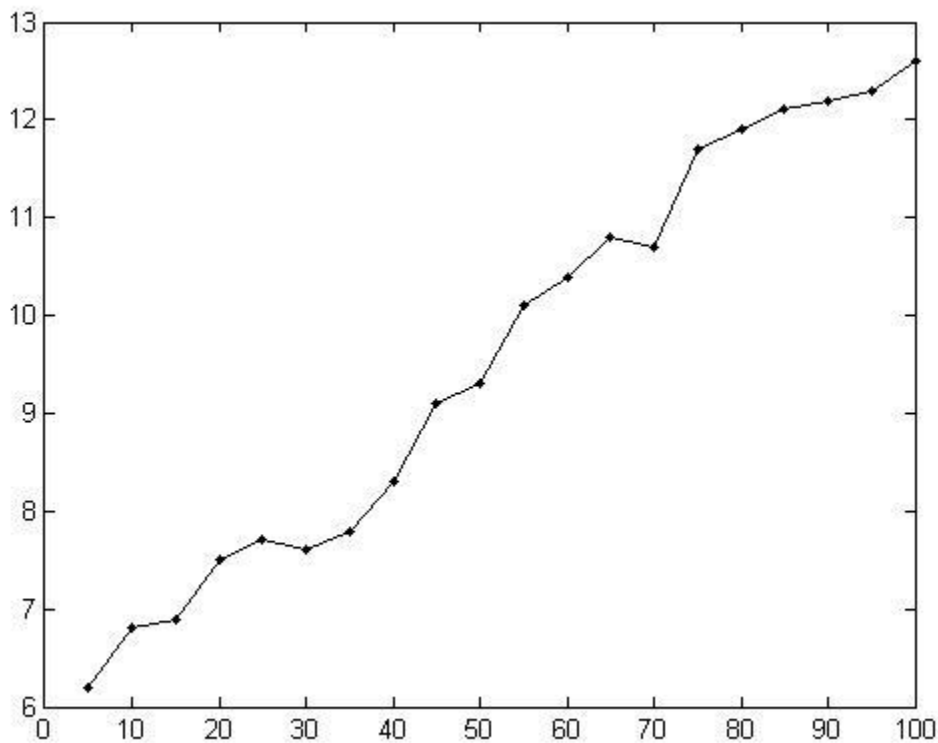


Assignment 1

Q1) GRAPH BETWEEN **K** vs **ERROR**:



OBSERVATION : this graph shows that on this data set if we increasing our 'k' value then error increase. The reason for this is some digits like

1 & 7 their image data for these digit are similar. So the mixing of data for these images is more. Similarly for the case of 4 & 9.

So if we increase our k then the chance of error increase due to high mixing of data. this graphs shows at very low value of k like

5 the error is around 6% as we increase our k it reaches to 13%. It may vary depend on the data. This error also vary how many

Data you choose for training set.