

1. Q: What is the role of the number of training points to accuracy?

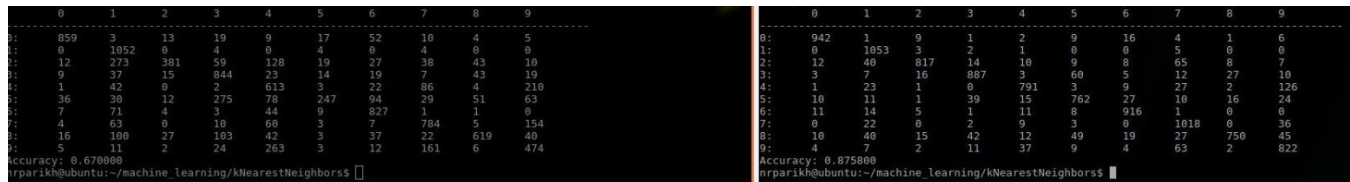


Figure 1: The figure above shows the effect of number of training points on the accuracy of the algorithm. The left hand side of the figure is the result obtained with 100 training points while on the right hand side of the figure is the result obtained with 1000 training points. It is clear from the above figure that as the number of training points increases the accuracy of the algorithm *increases*.

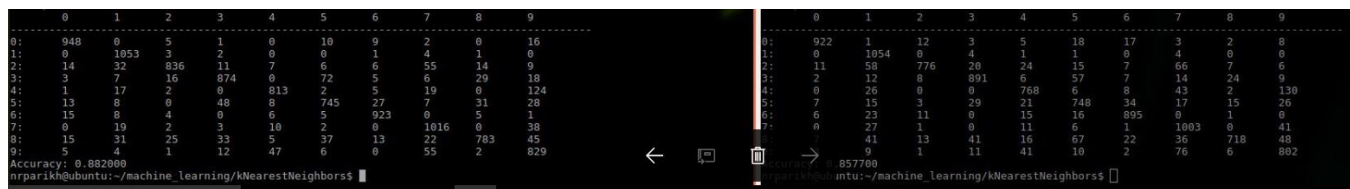
2. Q: What is the role of k to accuracy?

Figure 2: The figure above shows the effect of selecting the k on the accuracy of the algorithm. The left hand side of the figure is the result obtained when $k=1$ for 1000 training points while on the right hand side of the figure is the result obtained for same number of training points with $k=7$. Though the figure shows that the accuracy is higher when $k=1$. For the same number of training examples, the lower the value of k the higher the accuracy.

3. Q: What numbers get confused with each other most easily?



Figure 3: The most confusing pair of numbers for the algorithm is 4 and 9. Left hand side shows the result obtained with $k=5$ and no limit specified and on the right hand side shows the result obtained with $k=7$ and $limit=1000$. In both the cases, it can be seen that the most confusing pair of numbers is 4 and 9.