The best test set accuracy I got was for k= 100; accuracy = 88.9%

Some of the other test case accuracies I got with the k values are as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| Sr. No. | K value | Test Accuracy | Training Accuracy |
| 1. | 6 | 94.62% | 85.58% |
| 2. | 25 | 94.89% | 84.01% |
| 3. | 45 | 94.22% | 87.2% |
| 4. | 130 | 94.2% | 82.13% |
| 5. | 55 | 95.46% | 85.66% |
| 6. | 10 | 93.15 % | 85.42% |

These results are better and have more accuracy as compared to the accuracy result of decision tree implemented in the PA3.