**Accuracy of prediction**

**and**

**the effect of the value of k**

Accuracy of the classifier

|  |  |  |  |
| --- | --- | --- | --- |
| **k** | **Eucledian** | **Manhattan** | **Supremum** |
| 1 | 0.9 | 0.9 | 0.8 |
| 2 | 0.9 | 0.9 | 0.9 |
| 3 | 0.9 | 0.9 | 0.9 |
| 4 | 0.9 | 0.9 | 0.9 |
| 5 | 0.9 | 0.9 | 0.9 |

The table above is derived from the data in the file “output.txt”.

**Observation –**

1. Effect of k: Increasing the value of k implies that a larger data set is being chosen for predicting the class. As shown in the data above, when k=1, the accuracy of prediction by Supremum was 0.8, but subsequently when the value of k was increased, the accuracy of prediction by Supremum went up to 0.9.
2. Effect of distance metric: As shown by the data above, all the 3 distance metrics have evaluated to almost the same value.