Assignment 4

The no of next neighbors that are required for the model will be **5**

The Accuracy for the model for k = 5 will be **96.3 %**

The test error will be **0.037**

K	Test Accuracy	Test error
1	0.923	0.077
3	0.962	0.038
5	0.963	0.037
7	0.926	0.074
9	0.923	0.077

For KDE Model

The metrics that were considered as

1. kernel = "**Gaussian**" for real, integer values and "**linear**" for categorical

2. bandwidth = **1.0**

3. metrics: "**Euclidean**"

4. leaf size: "**40**"

The accuracy obtained for the KDE model considered above is: **72.23 %**

Considering both the models, we can say that KNN (k=5) will work better than KDE model.