

# Report

## KNN-Classfier & KNN-Regression

### **KNN-Classfier:**

For k=3, Validation Accuracy=95.0

For k=5, Validation Accuracy=100.0

For k=7, Validation Accuracy=100.0

For k=9, Validation Accuracy=95.0

For k=11, Validation Accuracy=100.0

For k=13, Validation Accuracy=100.0

For k=15, Validation Accuracy=95.0

Best value of k = 5

Test Accuracy: 100.0

### **KNN-Regression:**

For k=3, Validation data Error=[53.62412698]

For k=5, Validation data Error=[48.57910204]

For k=7, Validation data Error=[44.38411079]

For k=9, Validation data Error=[41.62955656]

For k=11, Validation data Error=[38.28889189]

For k=13, Validation data Error=[36.00164714]

For k=15, Validation data Error=[35.69611247]

Best value of k = 15

Test data Error: [47.1019378]

Submitted By:

Name: Hamim Ahmed Komol

Id: 011 181 114

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