KNN A1

Elliott Barnes, Marty Whelan

1. A brief description and justification of the distance metric you used

We used euclidean distance as our metric because it's a good formula for calculating the true straight-line distance between two categorical objects

2. <u>a brief explanation of the effect of k in the performance of your algorithm and a</u> recommendation of what value of k to use

Out of over 100 tests, the accuracy of correctly classified instances stays consistent when k is in the range 20-30

3. <u>a brief explanation of the effect of k in the performance of your algorithm and a recommendation of what value of k to use (i.e., you need to test your program with different values of k)</u>

We ran tests from the command line and tested various values within the appropriate range to validate the implementation.

4. An acknowledgement section listing your collaborations and online sources

Tutorials on assignment outline

5. <u>A program specification section listing the python version and libraries you used</u> matplotlib, pandas, numpy, sys, random