When your assignment is complete, please answer the questions in this text file and upload it to I-Learn.

1. Please provide the URL of your public GitHub repository.

https://github.com/danielfl09/CS450.git

2. Briefly describe your overall approach to the task and highlight the most difficult part of this assignment.

I began this assignment by first creating a function that calculates the Euclidean distance between two points. Then, I added to that function so that it could receive two datasets and compare each row of the test data to each row in the training data to find the closest match. I then saved the distances and their target as tuples in a list. I sorted the list and found the most common target among the top K, or neighbors. I then saved the prediction for each row in a different list and returned that list. Once I got the function to work, I converted it to a method in a KNearest class.

I then proceeded to test my function and compare it to the Knearestclassifier.

3. Briefly describe your process for handling numeric data on different scales (i.e., normalizing).

I used the standard scalar function from sklearn’s metrics library. I found that my function did better without it. I couldn’t figure out why so I commented that part out.

4. Describe your results for the Iris data set. (For example, what level of accuracy did you see for different values of K?

I saw that the levels of accuracy were best with a k of 3-5, at around 35-45%.

5. How did your implementation compare to existing implementations?

The existing implementation was better than what I could come up with. I am anxious to find a way to improve my accuracy.

6. Describe anything you did to go above and beyond the minimum standard requirements.

I spent about 8 hours on this assignment, and I couldn’t spare more time on it this week. I only completed the standard requirements.

7. Please select the category you feel best describes your assignment:

A - Some attempt was made

B - Developing, but significantly deficient

C - Slightly deficient, but still mostly adequate

D - Meets requirements

E - Shows creativity and excels above and beyond requirements

Meets requirements

8. Provide a brief justification (1-2 sentences) for selecting that category.

My classifier and predict method work. They can read in data, compare input values to the training data, and make a prediction. I believe I met the standard requirements.