The Neural Network: Katelyn Fu, Rahi Dasgupta, Edwin Lin

3d i. Which k-NN, SVR, or DT performed the best? Justify with a plot. Why do you think that model had low validation loss?
We believe that the model that performed the best was the decision tree just solely based on the MSE value. We are still working on justifying it with a plot though.

ii. Compare the tradeoffs between using a k-NN, SVR, or DT classifier. Hypothesize in what settings each would outperform the other two.

- **Time it takes to train**
- **Time it takes to test**
- **Train loss**
- **Test loss**

Decision tree regression models train decently quickly and have a fast predictio,n but struggle with overfitting if the depth control isn't maintained. SVR's has a better generalization but has an extremely long training time. k-NN's train the fastest but have the slowest prediction time. They also struggle with larger datasets so it's best to use it on smaller ones.

What, if any, insights did you get from your PM meeting?
From our PM meeting, we gained insight on how to have cleaner code and not be redundant in our code.

What challenges arose this week?
We didn't have any challenges this week!

What went well?
We were all able to learn about new models and we were able to get them to work!

What do you want to do for the last week of your project? (April 12 - April 19)
Have guidelines on how we can showcase this project for our portfolios and how we can make our streamlit website look professional.

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