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Artificial Intelligence
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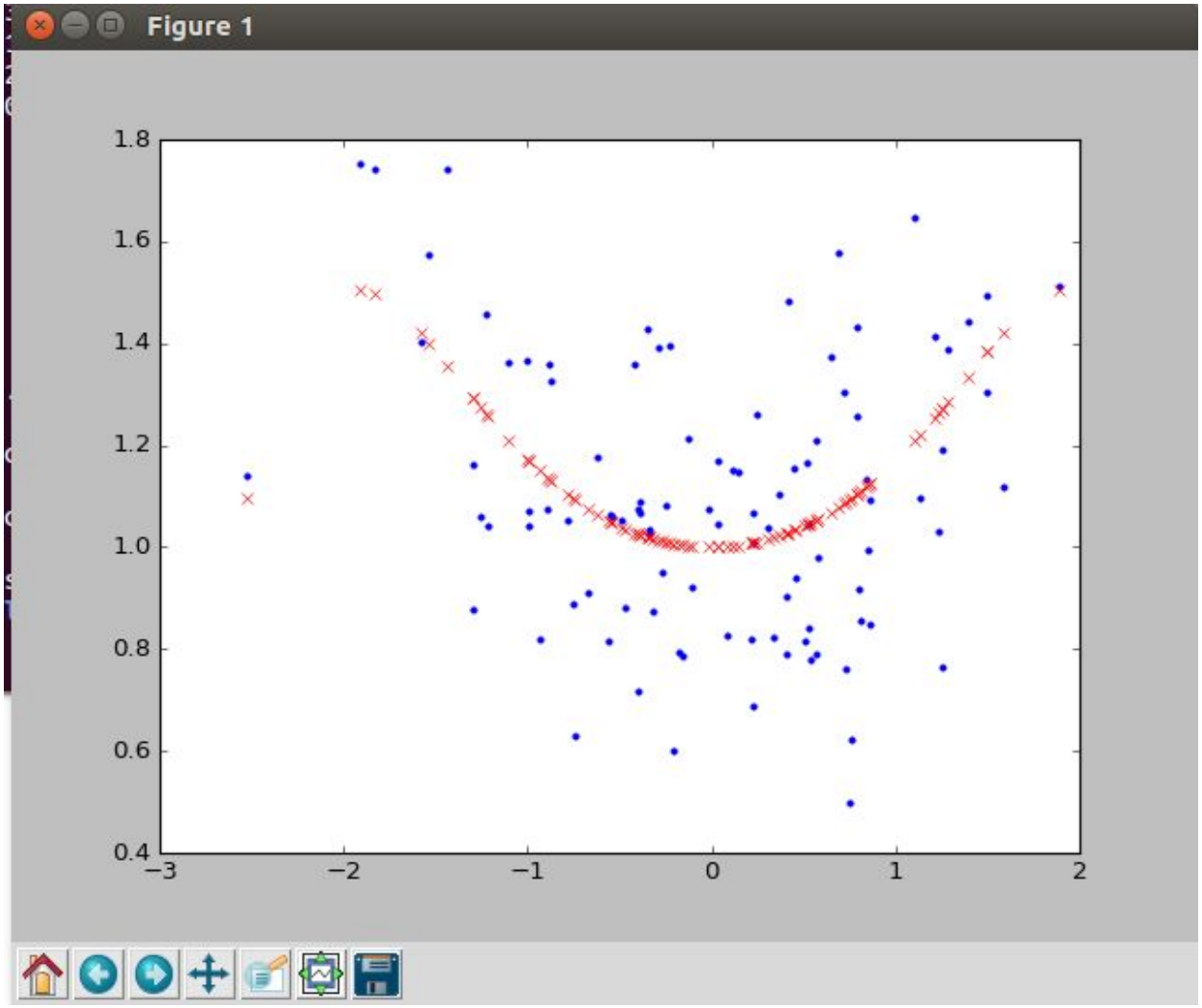
Homework 4.

a) Here is the plot that is generated for the dataset that is used in this assignment:



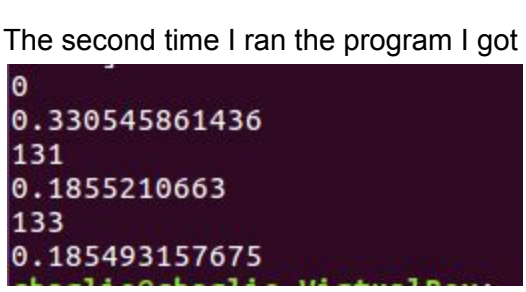
After the plot is generated the errors are calculated for the nearest neighbor. All the odd numbers are done between 0 and 900.

b) Here are the the errors:

I ran the application a few times. For the first time I ran it, the best errors were at 178, 161 and 177.

If these values are averaged, the best index is around 172. The values are so close to one another so taking the average would provide a good idea of in general where the best would be.

The second time I ran the program I got 0, 131 and 133.



If these values are averages, the best index is around 88. However, in this case 0 seems to have a much higher CV Eout compared to the other two. In this scenario I would consider 0 to be the best because of how significant its value is.