**Portfolio 1**

Think about your learning from weeks 1 to 3. Pick one concept that was covered that you found more difficult to understand than anticipated. Write a short reflection covering the following issues:

1. Why do you think this concept was challenging to you?
2. What have you done to overcome it?
3. Did your approach work out or not?
4. How will you approach similar challenges in the future?

If you have encountered no problems at all, write a short reflection covering the following aspects:

1. Which concept and why was particularly interesting to you?
2. How do you think you could use this knowledge in the future?
3. How did you approach learning this concept?
4. How will you approach similar challenges in the future?

Please try not to exceed ~250 words.

I found the naïve Bayes classifier more complicated than I thought. I think this is because I have not learned probabilities before, so the notation, terminology and properties of probabilities were completely new to me. I also ignored some of the materials that the teacher has made available on LC. Because of this I could not follow the lectures easily and I got lost a bit. I have therefore decided to go through the suggest pre-reading and videos that the teacher uploaded on Learning Central, and go through the lecture and exercises one more time. After that I took part in the optional practicals to sort out any doubts I had left about the topic. I now feel more confident about the naïve Bayes classifier. In the future, I will always go through the pre-reading materials suggested by the teacher to check if the lectures are going to need any knowledge I am missing, and make use of optional practicals and office hours to get more guidance from the teacher.

I found the Wagner-Fischer algorithm to be the most complicated element of the course so far. I think this was due to me going to the practical where the exercise was covered before I had completed before I had completed watching all the asynchronous lecture videos for the topic. I had broadly understood the concept of Levenshtein Distance but found the mathematics difficult to understand. To combat this, I watched a video on YouTube of somebody walking through them programming it in python as I often find this to be than I am at reading mathematical equations. For the Wagner-Fischer algorithm I initially found the process of generating a value in each box of the grid difficult due to feeling slightly overwhelmed with numbers and not being able to keep my focus completely set on the element at hand. From this, finding a path back was also something I struggled with but was explained very well by one of the people on my table in the practical. When I got home, I looked at the lecture videos as I should have done before attending practical and the python solution provided in the slides helped solidify what I had learnt in the practical. This overall taught me I need to be better prepared for the practicals by doing the asynchronous work beforehand, something I have done before each of the subsequent practicals and I have found much greater success in those tasks.a very useful way of working out the solution as I am better at programming