Week 3 Reflection

1. What was the focus of this week?

This week was completely focused around the Quicksort algorithm, as well as its randomisation. The first part looked at the implementation of quicksort, and the second part the mathematical analysis. There were also two videos on probability that looked at the skills needed to analyse quicksort.

1. What did I learn this week?

I learned about the elegant and intriguing Quicksort algorithm and how to implement it, and then use randomisation to achieve an average running time of O(n log n). On an general algorithm scale, I had an introduction to randomised algorithms as a whole and a bit about the mathematical probability associated with it.

1. What did I already know?

Everything this week was quite new to me!

1. What were some challenges this week?

The mathematical and probability concepts covered in the probability review and quicksort analysis were slightly difficult to keep up with as I have not studied these things yet in maths.

1. (Content wise) What do I need to improve on for next week?

Making sure I understand the concepts so that the end of week quiz is less difficult for me.

1. How has my understanding of Algorithms increased this week?

This week I learned about the usefulness of randomised algorithms, the optional gain on time that can be had by implementing them, as well as some of the probability behind randomised algorithms.