Critical Reflection: Week 3: Task A

In this Task - we were introduced to using recursion - I found recursion to be quite hard to visualise. This is a trend of me needing to visualise in order to understand a concept properly. To Overcome this, I used the debugger here to actually see the code path of using recursion. This proved to be extremely fruitful. The recursive calls and returns can be a little bit overwhelming at first but after I did this a couple times I got extremely comfortable with using recursion instead of a loop and was in awe with how neat the implementation of a concept looked. Learning about "winding" and "unwinding" of the recursive functions seemed like a crazy revelation to me.

The second biggest take away was passing values by reference. I personally implemented overloaded functions to support a return as well as a pass by reference but this concept actually made understanding pointers much easier in the later weeks. After having worked with the other data structures in the past - Once I was able to visualise the structure and recursion and develop pseudo code the task went by effortlessly.

Lastly, the concept of divide and conquer. For the remove Item function I could have very easily stuffed the solution into one function - but in order to have better code readability I bifurcated the concept and implemented a switch case to deal with the different cases rather than have an if-else ladder which I was quite happy with.