C\Cpp\Exercises\exercise\_20250922\_1314\solutn\_evaluatn.docx

This document is a semi-hiddem document for detailing evaluation, feedback, and results.

# Log

## 2025

### 2025 / October

#### 07/10/2025

* Last week
  + On the 29th of September I sent an email that could be regarded as a partial submission
    - I attached my Attempt No. 1 of the solution and the complimenting solution justification
    - I asked them if there was a deadline for this task
      * The first email presenting the challenge inferred that they would accept submissions a week from that email
        + Did they expect candidates to take only a week to develop a solution ready for submission? I was not sure
    - I asked them whether I should continue with my solution or submit my work as is
      * I said that my solution is not currently at the standard I would've liked due to the following:
        + The algorithm cannot work with 10 digit sequences, only a maximum of 5 due to using large dynamic arrays
        + It is messy and not the easiest to read
        + I would still like to explore implementing advanced data structures and algorithms that I am not currently comfortable using but believe that they might make the program more efficient
        + Results from my attempt no. 1:

3 Digit Sequence, Valid Combinations: 188

4 Digit Sequence, Valid Combinations: 598

5 Digit Sequence, Valid Combinations: 1899

* I spoke to the software engineering manager of the company who presented me with this challenge on Wednesday the 1st of October
  + They gave me the following feedback on my code
    - For starters it does not return the correct value because it is not complete
    - If it did return the correct value and was submitted for further peer review it would be graded poorly
      * Too verbose (and I would personally add also too convoluted)
      * Too messy
      * That my variable names that, while meaningful, are too long and hard to read
      * Lots of repetitive code looks like it can be abstracted into reusable functions
      * Reckons that the chess move 01 and 02 don’t need to be done the way they are – better to abstract the difference (into an array ?)
      * Some functions are too long
        + Perhaps he was referring to the shift or increment functions
      * My attempt no. 1 is 845 lines in total, too long for the expected solution
        + The software engineering manager has seen solutions around 60 lines
        + Says that the problem is not complicated, that it should not be over 200 lines (200 lines maximum, the less the better)
        + That a non-explicitly stated criteria of the challenge is simplicity

Better code is simpler, simpler to read as well

That it is a simple algorithm that does not need to implement any object-oriented concepts

* + Hinted that the answer is over 1 million
  + Said that there was no concrete deadline for the challenge, it was more dependant on the first candidate/s to get it submitted
    - Open until the (junior) role is fulfilled
  + Checked in with me, wanted to make sure that I wasn’t wasting my time, but offered to give me another week for me to work on it and then check in there
* So based on this feedback, will be criteria for my attempt no. 2 (or 3)