Name: Swoyam Pokharel StudentID: 2431342

## 1. What are the most challenging aspects of the coursework task?

The most challenging aspect of the coursework was understanding the concept of Caesar cipher encryption, ensuring the program handles edge cases effectively, such as dealing with non valid input choices or large shift values.

## 2. How did you go about completing the task?

Firstly, I learnt about what a caesar cipher is, then I started thinking about ways to implement it with python, where I ended up with 2 possible answers, either to go with ASCII or to go with the index of the alphabet. I personally preferred the idea of going with the character set's index. So I create a Minimal Viable Product first, something simple that just takes a message, goes through the collection of alphabets and finds the character's index, returns the character that is shift\_bit index above it, where shift\_bit contains a user input value. After I implemented that, I went through creating all the functions as provided in the guidelines, and implemented each function as per its requirements.

## 3. What have you learned over the course of completing this coursework task?

Through completing the coursework, I have learnt about clever ways to handle code redundancy especially in the cases where I have to keep validating user input for multiple inputs. Furthermore, I learnt about the importance of proper documentation. I've also learnt things about encryption and its types (symmetric and asymmetric).