



## Introductory Programming and Problem Solving Skills (4CS001)

## Coursework1

## Report

Student ID :2417724

Student name : Hardik K.C.

Group : L4CG4

Module Leader : Yogesh Bikram Shah

Submission Date :21/01/2024

- 1. What are the most challenging aspect of the coursework task?
  - The most challenging aspect of the coursework was understanding the Caesar cipher algorithm. The Ceasar cipher algorithm was a new concept to adapt in python program. The handling of encryption and decryption logic was challenging as It was necessary to make sure the code was correct and could handle both of the function efficiently. Code readability was one of the main issue too as it had to be formatted in a clean and proper way to read it. Handling edge cases was difficult too as I had to ignore all the spaces and punctuation. The Ceasar cipher is only meant to be used for educational purposes and cannot be used for other purposes because of the security. It is not one of the better way to encrypt messages.

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

- Completing the task was a hard one as I was not familiar with the concept of Caesar cipher algorithm. I had to learn about it and implement it into a function and make it work. I had to use a lot of helps from friends and internet. I had a lot of problem while programming as I had to face a lot of bugs and problems while making the program. The encryption and decryption function had a lot of problems with special characters as it had to skip the whole iteration and encrypt or decrypt the word. Testing was the place I faced a lot of bugs and challenges. And I had to overcome them in a short period of time. There is still a lot of room for the program to improve and get better results.
- 3. What have you learned over the course of completing this coursework task?
  - This course helped to learn about encryption basic and how to use the logic to encrypt the data. It helped me to understand the basic encryption concept that is used to encrypt the data and secure the data. It helped me to make my testing and debugging the skills more fluent and efficient. It also helped me to understand the limitations of Caesar cipher. I also learned to use many function work together in sync so that the code is more efficient and better to watch. It also helped me to understand the cryptography basics and practical application of the concept Caesar cipher. I also learned more about the cryptography course and made me more keen in knowing cryptography. This really helped me to enhance my program solving skills.