



### 4CS001 -

# Introductory Programming



## Problem-Solving

A documentation on

Cesar cipher coursework

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- 1. What are the most challenging aspects of the coursework task?
  - ⇒ The coursework on the Cesar cipher focuses on encrypting and decrypting text messages from any file with the ".txt" extension or from user input entered the console.

This course work's most difficult components were asking the user for input repeatedly unless the right information was entered, encrypting and decrypting the message the user entered from the console, to check if the file name entered by the user exists or not, reading the content from a.txt file, and writing the encrypted or decrypted output to a different file called "results.txt." to ask the user if they want to encrypt or decrypt a different message once more.

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

⇒ First, I read the guidelines and instructions of the Cesar cipher coursework on what functions are required to be made and how they should work. The example of implementation that was given on how a function should work also helped a lot.

To complete the task, I took reference from the lecture slides, and from the question that I had solved which was given in tutorial and workshop classes. The main challenge for me was to encrypt and decrypt messages entered by the user from the console or read from a text file. To encrypt the message entered by user or read from a text file, first I converted each character of the message to its ascii value using python's built-in ord () function after then I applied my algorithm to encrypt and decrypt each character of that message.

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

⇒ While solving the task given in the coursework. I have learned many things like how to divide a project into different blocks of codes using functions which makes us not to repeat same code again. We just need to call the function by its name. Other than that, I have learned error handling using try exception for all kinds of error like value error, name error and indentation error. Moreover, I have learned about problem solving skill as well from this coursework.