

UNIVERSITY PARTNER



UNIVERSITY OF  
WOLVERHAMPTON



HERALD  
COLLEGE  
KATHMANDU

# Introductory Programming and Problem Solving (4CS001)

## **CourseWork-1**

Student Id: np03cs4s230158

University Id: 2358196

Student Name: Avimanyu Rimal

Group: <L4CG6>

Lecturer: Mr. Yogesh Bikram Shah

# Instruction for Course Work 1.

Download the question paper containing the assessment details from resource (coursework 1):

- You should upload your solution to this challenge as a .py file and pdf file accordingly.
- This assessment is worth 40% of the overall module grade.
- If you have any questions, please speak to a member of the module team.
- Python file name should be cesar\_cipher\_studentID.py
- PDF file name should be cesar\_cipher\_studentID.pdf

**NOTE: Please follow the instruction from the assessment strictly. Function names should be as it is as provided in the question paper documentation. NO MODIFICATION WILL BE ALLOWED.**

In addition, you should also upload a document containing answers to the following three questions in pdf format (max 150 words per questions):

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

Ans: -

The Coursework is about the Caesar Cipher encryption and decryption techniques which we need to complete in the python. While completing this program I found some of the challenging points. It is case sensitive the uppercase letter and lowercase letter used while programming is considered the different characters which make it challenging for completing this coursework. Beside it defining the function is also challenging because we need to check that the functions are correctly defined or not with the appropriate parameters, return value for the correct output. On the other hand, the operation of managing files is just like opening, reading, writing and closing files correctly are the other challenging aspects while doing this program. One of the other main challenges for me to complete this coursework was to understand the concept of encryption and decryption. On the other hand, we have to make a different function for the encryption, decryption as well as for the file handling which creates some confusion for the completion of the coursework.

2. How did you go about completing the task?

Ans: -

The coursework problem is challenging for me to solve. First of all, I made a plan on how to implement and do this Caesar cipher program encryption and decryption in python. I also took help from my friends in order to complete this coursework. This kind of program is new to me however, I have the knowledge to define the function. Then after the ASCII values and their implementation on this program is also new for me. So, I visit different sources to learn about it. After all, I create the program to encrypt and to decrypt the input given by the user with another input message of shift number according to the user's choices. When I ran the program for the first time, I found many errors, and then I researched on the web with the help of the internet to solve my errors and I also took the help from my tutor and my friends. Finally, my program was fully error free and it is ready for submission.

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

Ans: -

I have learned the Caesar cipher method, encryption, decryption, ASCII values related to the letters which was totally unknown for me before this coursework. I got a chance to learn about them. I also learned the working mechanism of the Caesar cipher encryption and decryption program. I have also gained knowledge of how to find errors while running the code. I also learned to define the different functions and also learn about functions, variables, data and data types. Overall finishing this coursework helped me to get a better concept of encryption and decryption. Overall, the program was challenging, it was a wonderful experience to solve the problem.

These will be considered in order to determine your score for the knowledge and understanding section.