

CS2610: Computer Organization and Architecture Lab

Lab Assignment - 2

Submission Deadline: 7-02-2022

1 Problem - Encryption

Write an assembly language program to encrypt digits as shown below:

Input digit	0	1	2	3	4	5	6	7	8	9
Encrypted digit	5	7	9	1	3	6	8	0	2	4

Your program should accept a string consisting of digit and non-digit characters. The encrypted string should be displayed in which only the digits are affected. For example, if the input is *C5o2A3L4a1B*, the output will be *C6o9A1L3a7B*. The user should be queried whether he or she wants to terminate the program. If the response is either *y* or *Y* you should terminate the program; otherwise, you should request another input string from the keyboard. You can assume that the input string will not exceed 20 characters.

2 Submission Guidelines

- Write the code with proper comments wherever necessary and maintain proper indentation.
- Name the program with your roll no. Ex: If your roll no is CS20B001, your file name should be CS20B151.asm. If there are multiple files, use CS20B151_1.asm, CS20B151_2.asm etc.
- Place all the required files in a folder and compress the folder using zip compression. Name your folder in the following format. If your roll no is CS20B151, name it as CS20B151_A\$.zip, where '\$' denotes the assignment number.