



CS217 - Object-oriented Programming (OOP)

Assignment # 3

Max Points: 20

Due Date: Wednesday, May 26, 2021, 11 p.m.

Carefully read the following instructions!

- It should be clear that your assignment would not get any credit if the assignment is submitted after the due date. No assignment will be accepted after the due date.
- Strict action will be taken if submitted solution is copied from any other student.
- If you find any mistake or confusion in assignment (Question statement), please consult before the deadline. After the deadline no queries will be entertained.
- For any query, feel free to email at: **basit.jasani@nu.edu.pk**
- **Submission:** Submission will only be accepted through GOOGLE CLASSROOM. Submit all your codes in a single folder name it as your Student ID “KXX-XXXX”. The folder will contain one text file as ***TASK.txt*** with proper commenting of the code.

For the following task, you need to create two text files, namely, input.txt and KXX-XXXX.txt.

- **input.txt** should contain some arbitrary text, comprising letters and digits
- **KXX-XXXX.txt** (XX-XXXX would be your student ID) should initially be empty. This file is going to store the output of your program

Task to be performed:

Write a program that reads the contents of file input.txt, encrypts its contents and save the modified text to your output file i.e. KXX-XXXX.txt.

The encryption should be done according to these rules:

"Every digit should be converted to a capital letter in a way that digits are treated as sequence number of the alphabets e.g. 1 should become A, 2 should become B, 5 should become E, 11 should become K. Every digit less than 1 or greater than 26 should be converted to the letter Z."

Sample Input 1 (input.txt):

Hello this t3xt is 4 the 1st try 25

Output 1 (KXX-XXXX.txt):

CDAY

Sample Input 2:

The next ma5or bitcoin price crash will wipe up to 12 per cent from its va15e and cause it to stagnate in a y14ars-long "crypto winter", a marke13 expert has warned. ... Last M21rch, the value of bitcoin had just halved following a series of flash crashes, in part sparked by the c19ronavirus pand11mic.

Sample Output 2:

ELONMUSK

Note: You can make assumption that each word can have maximum 1 digit. These sample inputs are only for reference. Your program should work for any text given as input.

***** Happy Coding *****