BLM1011 Introduction to Computer Science Assignment - II

Due 29/11/2020 -23:59

Instructor: Assist. Prof. M. Amaç GÜVENSAN

<u>Algorithm 1:</u> Design an algorithm and write the program which encrypts the given text based on the following formula and decrypts it into the original form.

```
Shift = "left" -----> letter -X -> newletter shift = "right -----> letter +X -> newletter
```

P.S. This formula should be applied only on the letters.

Input (should be given by the user):

Text: The information which should be encrypted.

!!You should use gets()/puts() functions to read/write the text data in your C code.

!!You should use array of characters to save the given text. Each given text terminates with a

NULL character in C.

Shift: The direction for the encryption.

X: The number of shift operation.

Example 1:

Text= I love this game.

Shift = left

X=1

Answer:

Encrypted Text: H knud sghr fzld. Decrypted Text: I love this game.

Example 2:

Text= How old are you?

Shift = right

X=2

Answer:

Encrypted Text: Jqy qnf ctg aqw? **Decrypted Text:** How old are you?

Example 3:

Text= I am 60 years old.

Shift = right X=3

Answer:

Encrypted Text: L dp 60 bhduv rog. Decrypted Text: I am 60 years old.

SUBMISSION

- 1. Assignments submitted after submission deadline will not be evaluated.
- Collaboration on any assignment is strictly prohibited. Submitted assignments are automatically checked for similarities. Infractions will be given a zero for the entire assignment.
- 3. Assignments MUST be submitted via online.yildiz.edu.tr
- 4. You should submit your .rar or .zip file (One compressed file consisting of 2 files) with the name of your studentid as given below.

Example File Name: 18011001.rar or 18011001.zip

(should include 18011001.pdf and 18011001.c)

Content

- An PDF file which contains
 - a. Flowchart Flowchart for Algorithm 1. (You can draw your flowchart either by your hand or by computer. Just work clean !!!)
 - b. Source code Just copy the source code into the PDF.
 - c. Analysis should be done for Algorithm 1 for each possible different cases
- A Source Code

Do not forget to prepare a cover page which should include

- Course Name
- Course Group
- Instructor Name
- Assignment Number
- Delivery Date of the Assignment
- Student Id
- Student Name and Surname
- Signature

<u>ATTENTION</u>

• Assignments that don't comply with submission rules will NOT be evaluated. "NO EXCEPTION"