26.11.2020

BLM1011 Introduction to Computer Science
Assignment - II

Due 29/11/2020 –23:59

Instructor: Assist. Prof. M. Amaç GÜVENSAN

Algorithm 1: 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.
2. 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

ATTENTION

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