CPL Project

Encryption is the process of transforming original text into unrecognizable form for security. While decryption is the process of transforming the encrypted text back into its original form for the receiver to understand the original message.

In this project, you are required to work in **teams of three** to develop an encryption and decryption program that can,

- Accept a string from the user.
- Encrypt the entered string.
- Decrypt the entered string.
- Print the output to the user

Each of these features (encryption, decryption) should be implemented in **separate function** and should appear to the end user in a **menu** where he can select which functionality he wants to perform.

Your program should **utilize loops** to work continuously to allow the user to perform as many operations as needed.

Please note that you can search about the well-known encryption and decryption techniques and you can implement ANY of them. The following is just an example for simplicity.

One of the simplest encryption techniques is the **Simple Substitution Encryption.**

In this method, you will have a variable called a **KEY** which you can initialize with any value in range [1, 25].

When the user enters a string, each character in this string will be **shifted KEY times** according to the alphabetic order.

Example:

Assume that,

- **Key = 3**
- **Input String = "HI"**

Encrypting the first letter "H" of the original text by shifting 3 letters,

Alphabets: A, B, C, D, E, F, G, **H**, I, J, **K**, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.

Encrypting the second letter "I" of the original text by shifting 3 letters,

Alphabets: A, B, C, D, E, F, G, H, **I**, J, K, **L**, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.

Then, the encryption of **"HI"** is **"KL".**

(Note that: The decryption of **KL** should be **HI**)

Deliverables

- You should deliver .C file with the stated functions.
- You should work with your team on Github.
- You MUST attach a document stating the encryption technique you used (or Readme in your repository)
- Using any advanced encryption technique is a plus.

General Rules

- All the team members must participate in the implementation.
- Please refer to your facilitator or one of the instructors if you have technical issue or with your team.