

Lab 8 - Out of Lab Assignment

Due Saturday, April 03, 2021, 11:59 PM

Acknowledge your collaborators or source of solutions, if any. Do all of the following.

1. Encryption is a process which transforms some human readable text into an unrecognizable form. Decryption is a process of converting the encoded/encrypted data in a form that is readable by a human. An encrypted file can be sent to someone who can read this if and only if he/she knows how to decrypt the file. We will be implementing a very simple encryption-decryption program.

Write a program that has two separate functions. Encrypt and decrypt. Encrypt function can take a text file as an input and encrypt the content of the file. You need to read all the characters of the file and add 20 to the original character to change it to a different character. Then you need to write that character to a different file named "encrypted.txt".

For an example, if the original file had "abc" then it will be changed to a different character.

Original character	Encryption	Encrypted character
a (97)	$97+20=117$	u
b (98)	$98+20=118$	v
C (99)	$99+20=119$	w

This encrypted file will be read by the decrypt function. This function will reverse the process. In our case it will subtract 20 from every character.

For an example if the encrypted.txt file contains "uvw". Then it will be decrypted to "abc".

The program should display the decrypted file.

The original file content for testing can be as follows:

"Texas Tech University"