Essential Algorithm

Project 1

Introduction

Write a chat program based on the client-server model using Python

Specification

The model used for this project is single server – single client, the following must be implemented, messages between the server and the client must be encrypted using caser cipher technique.

The server:

1. One client must be able to connect to your server at a time
2. Server should be able to receive and decrypt the message without the key that was used for encryption
3. Server should use either:
   1. Brute force attack to try all the 26 letter shift using the following equations, for encryption and for decryption, where is the number equavlent to the letter and is the shift of the letter.
   2. Frequency of letters in the English language more information can be found here: <https://en.wikipedia.org/wiki/Letter_frequency>

The Client:

1. Should be able to prompt for the user input, encrypt the message and send it to the server
2. Message should be at least 64 characters

