Encryption and Decryption

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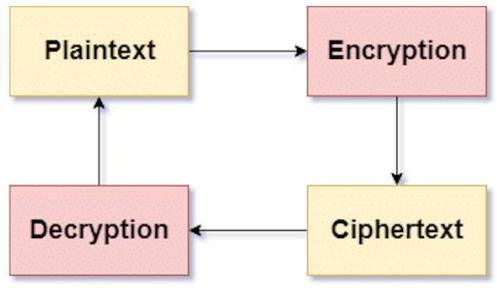
Guide: Purvi Prajapati

Abstract: A communication must be encrypted in order for its recipients to never be able to interpret it. I'll create a GUI application that can encrypt and decode data using Python in this tutorial. Before using Python to encrypt and decrypt data, you must create a programme that prompts you to choose between encrypting and decrypting a message. The user should then communicate with the programme through message. The user's message must be converted into a secret code if they opt to encrypt their message. However, your programme should be able to translate a secret code into a meaningful text if the user choose to decode the message.

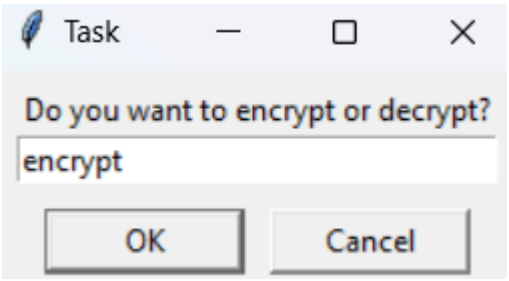
Technologies: Python



Introduction: One of the major problems for organisations in the constantly changing world of data and information transmission is the security of the file contents. Other sorts of data that are transferred over FTP or emails lose effectiveness if they are keyword-protected, however emails and logins can also be password-protected. The security and usefulness that parties participating in file transfers are looking for are provided by file encryption in this situation. What is encryption then? To hide its true content, information is encoded into a code. The only way to access the file's contents is to decode it. Encrypting and decrypting data is known as cryptography.. During the encryption process, a piece of information is encrypted to make sure that only authorised users may access it. It is essential because it gives you the ability to securely protect information that you don't want others to have access to or see. When data has been encrypted and become unreadable, decryption is the act of retrieving the unencrypted form of the data. During decryption, the device extracts and

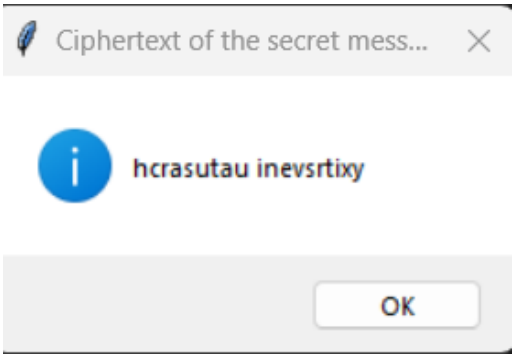
modifies the jumbled data. It transforms data into understandable texts and pictures for the reader and the computer system. Let's examine the use of Python to encrypt and decrypt some of our files. We'll employ encryption, which uses the same key to both encrypt and decrypt the information.

Encryption of a Message:

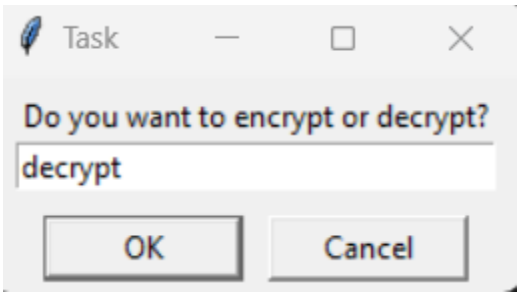


After executing the code you have to select whether you want to encrypt or decrypt the message.

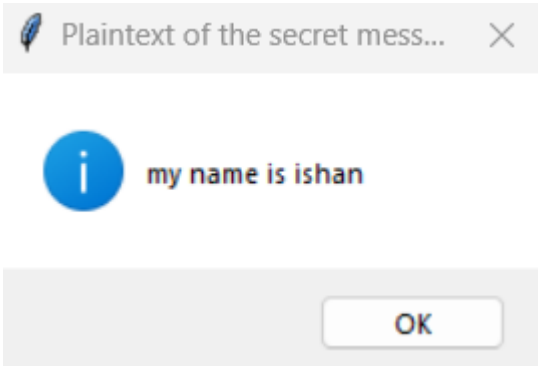
Enter the plain text for Example: Charusat University and in output we will receive the Encrypted message.



Decryption of Message:

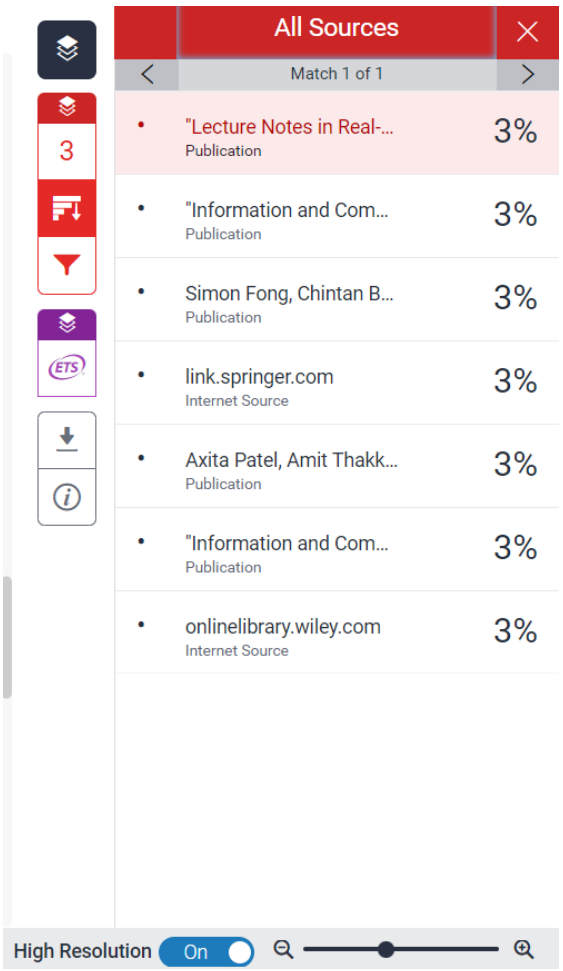


Enter the cipher text For Example: **ymn ma esii hsna** and in output we will receive the decrypted message.



Refrences:

https://www.geeksforgeeks.org/how-to-encrypt-and-decrypt-strings-in-python/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