

Caesar Cipher Program

Description

The Caesar Cipher program is a simple encryption and decryption application based on the Caesar cipher technique. The Caesar cipher is one of the earliest and simplest methods of encryption, where each letter in the plaintext is shifted by a fixed number of positions down or up the alphabet.

Key Features:

- **Encrypt Text:** Shift each letter in the input text by a specified number of positions to produce encrypted text.
- **Decrypt Text:** Reverse the shift operation to convert the encrypted text back to the original plaintext.
- **Customizable Shift:** Allow the user to specify the number of positions to shift (key) for encryption and decryption.
- **Support for Upper and Lower Case:** Handle both upper and lower case letters while preserving their case.
- **Ignore Non-Alphabetic Characters:** Non-alphabetic characters (such as digits and punctuation) are not altered.

How to Use:

1. **Run the Application:** Start the application using your Python environment.
2. **Encrypt Text:**
 - **Input Text:** Prompt the user to enter the text to be encrypted.
 - **Specify Key:** Ask the user to specify the number of positions to shift (key).
 - **Display Encrypted Text:** Show the encrypted text after applying the shift.
3. **Decrypt Text:**
 - **Input Encrypted Text:** Prompt the user to enter the text to be decrypted.
 - **Specify Key:** Ask the user to specify the number of positions to shift back (key).
 - **Display Decrypted Text:** Show the original text after reversing the shift.