**- README For Playfair Cipher..**

***Introduction***

The Playfair Cipher is a cryptographic technique used to encrypt and decrypt messages. It operates on pairs of letters (digraphs) instead of individual letters and utilizes a key-based table to perform the encryption and decryption process.

***Usage***

1. Run the program.

2. You will be prompted to enter the key used for encrypting the message. The key should be a string of characters.

Next, you will be asked to enter the original text you want to encrypt..3

. The encryption process will be executed, and the encrypted text will be displayed.4

. The decrypted text will also be displayed to the user.5

***Important Notes***

- The key should be a string of characters and can include uppercase and lowercase letters.

- Numbers and punctuation marks in the original text are ignored.

-The letter "J" is replaced with "I" in the original text.

The encrypted text is displayed as a continuous string without any separators between the encrypted characters.

***Example***

Here's an example of how to use the program:

Enter the key for the Playfair cipher:

mykey

Enter the plaintext to be encipher:

Hello World

Playfair Cipher Key Matrix:

M Y K E A

B C D F G

H I L N O

P Q R S T

U V W X Z

Encrypted Message: RLSGVDXTYATM

Decrypted Message: HELXLOWORLD

***Modifying the Code***

If you wish to modify the code to suit your specific needs, you can adjust the key used in the encryption and decryption process and make any other modifications to how the process is executed.

**README For Affine Cipher.. -**

***Introduction***

The Affine Cipher is a type of substitution cipher that combines the functions of the Caesar Cipher and the Multiplicative Cipher. It uses a pair of keys, namely key1 (a) and key2 (b), to encrypt and decrypt messages. The encryption process involves multiplying the numeric representation of each character by key1, adding key2, and then taking the modulo 26. The decryption process reverses this operation to recover the original message.

***Usage***

. Run the program .1

. You will be prompted to enter the message you want to encrypt.2

. Enter key1 (a), which should be a coprime number with 26 .3

. Enter key2 (b), which can be any integer.4

5. The program will encrypt the message using the provided keys and display the encrypted message.

6. The program will then decrypt the encrypted message using the keys and display the decrypted message.

***Important Notes***

- The message should only contain uppercase letters.

- Key1 (a) should be a coprime number with 26 to ensure the encryption process is reversible.

- The encryption and decryption processes use modular arithmetic with a modulus of 26.

***Example***

Here's an example of how to use the program:

Enter the message:

HELLO

Enter key1 (a):

5

Enter key2 (b);

8

Encrypted Message is: DLWWX

Decrypted Message is: HELLO

***Modifying the Code***

If you wish to modify the code to suit your specific needs, you can adjust the input validation, add error handling, or extend the functionality of the program.