Shift Cipher Decryptor
User Guide

Overview

This document provides a step-by-step guide on using the Shift Cipher Decryptor, a C++ code snippet designed to decrypt messages encoded with a simple shift cipher. The program uses an exhaustive key search approach to decipher the encoded messages.
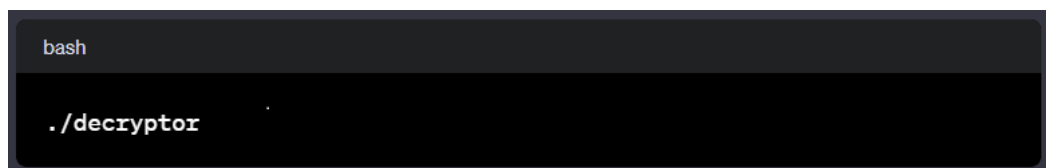
Prerequisites

Ensure you have a C++ compiler installed on your system.

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Run the Program

Execute the compiled program:

```bash
./decryptor
```

Input Cipher Text

The program will prompt you to enter the cipher text. Input the encrypted message and press Enter.

Review Cipher Text in 0 to 25 Indexing

The program will display the cipher text in 0 to 25 based indexing. This can be useful for understanding the input encoding.

EKS (Exhaustive Key Search)

The program will perform an exhaustive key search, trying each key from 1 to 25. For each key, it will display the decrypted message.

Check for meaningful decryption

After each decryption attempt, the program will prompt you to check if the decrypted message is meaningful. Enter 1 for "Yes" or 0 for "No."
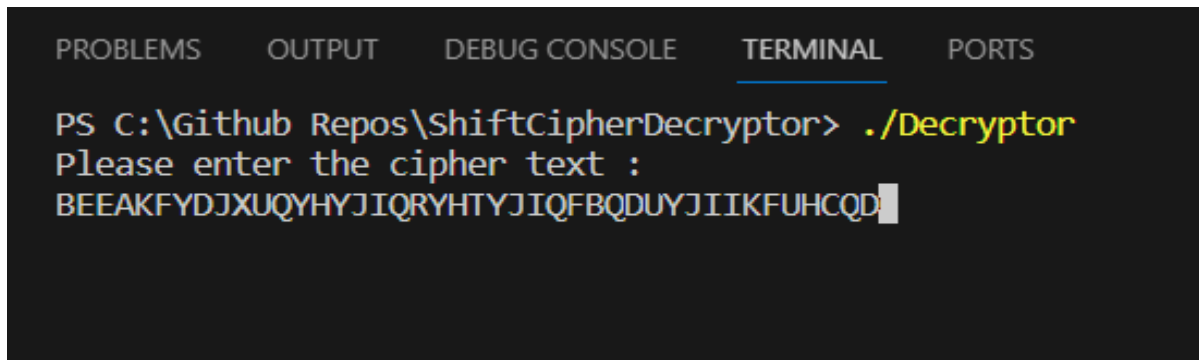
Review Results

At the end of the exhaustive search, the program will display the chosen key, the original cipher text, and the decrypted message.

Addition Notes

- The program assumes valid input; ensure the entered cipher text contains only uppercase letters.
- You can modify the code to use a different input method or integrate it into your projects.

Screenshots

Screenshot 1: Prompt for Cipher Text

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

PS C:\Github Repos\ShiftCipherDecryptor> ./Decryptor
Please enter the cipher text :
BEEAKFYDJXUQYHYJIQRYHTYJIQFBQDUYJIIKFUHCQD
```

Screenshot 2: Integer Indexing and EKS

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

PS C:\Github Repos\ShiftCipherDecryptor> ./Decryptor
Please enter the cipher text :
BEEAKFYDJXUQYHYJIQRYHTYJIQFBQDUYJIIKFUHCQD

Cipher Text in 0 to 25 based indexing :
1 4 4 0 10 5 24 3 9 23 20 16 24 7 24 9 8 16 17 24 7 19 24 9 8 16 5 1 16 3 20 24 9 8 8 10 5 20 7 2 16 3

For key = 1: ADDZJEXCIWTPXGXIHPQXGSXIHPEAPCTXIHHJETGBPC
Did you find it meaningful? [0 : No and 1 : Yes]
0

For key = 2: ZCCYIDWBHVSOWFWHGOPWFRWHGODZOBSWHGGIDSFAOB
Did you find it meaningful? [0 : No and 1 : Yes]
0

For key = 3: YBBXHCVAGURNVEVGFNOVEQVGFNCYNARVGFFHCREZNA
Did you find it meaningful? [0 : No and 1 : Yes]
```

Screenshot 3: Meaningful Decryption and Results

```
For key = 13: ORRNXSLQWKHDLULWVDELUGLWVDSODQHLWVVXSHUPDQ
Did you find it meaningful? [0 : No and 1 : Yes]
0

For key = 14: NQQMWRKPVJGCKTKVUCDKTFKVUCRNCPGKVUUWRGTOCP
Did you find it meaningful? [0 : No and 1 : Yes]
0

For key = 15: MPPLVQJOUIFBJSJUTBCJSEJUTBQMBOFJUTTVQFSNBO
Did you find it meaningful? [0 : No and 1 : Yes]
0

For key = 16: LOOKUPINTHEAIRITSABIRDITSAPLANEITSSUPERMAN
Did you find it meaningful? [0 : No and 1 : Yes]
1

-----------------------------------------------------
Your Key is : 16
Cipher Text : BEEAKFYDJXUQYHYJIQRYHTYJIQFBQDUYJIIKFUHCQD
Plain Text  : LOOKUPINTHEAIRITSABIRDITSAPLANEITSSUPERMAN
```

About the Author

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