

EXP NO :1

DATE:

CAESAR CIPHER

Aim: To implement encryption algorithm using Caesar Cipher technique.

Algorithm:

- Step 1: Prompt the user to enter a message to encrypt (text) and the encryption key (key).
- Step 2: Iterate through each character in text, applying the Caesar Cipher encryption.
- Step 3: Print the encrypted message.

Program:

```
#include <stdio.h>
int main() {
    char text[500];
    int key;

    printf("Enter a message to encrypt: ");
    scanf("%s", text);

    printf("Enter the key: ");
    scanf("%d", &key);

    for (int i = 0; text[i] != '\0'; ++i) {
        char ch = text[i];

        if ('a' <= ch && ch <= 'z')
            ch = (ch - 'a' + key) % 26 + 'a';
        else if ('A' <= ch && ch <= 'Z')
```

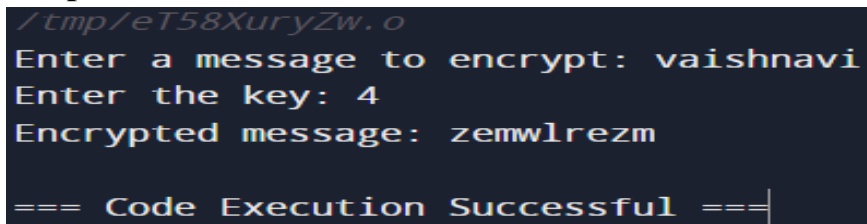
```
ch = (ch - 'A' + key) % 26 + 'A';  
else if ('0' <= ch && ch <= '9')  
    ch = (ch - '0' + key) % 10 + '0';
```

```
    text[i] = ch;  
}
```

```
printf("Encrypted message: %s", text);
```

```
    return 0;  
}
```

Output:

A terminal window with a dark background and light-colored text. The first line shows a file path: /tmp/eT58XuryZw.o. The second line is a prompt 'Enter a message to encrypt:' followed by the input 'vaishnavi'. The third line is a prompt 'Enter the key:' followed by the input '4'. The fourth line shows the output 'Encrypted message: zemwlrezm'. The fifth line shows the status '=== Code Execution Successful ===' with a cursor at the end.

```
/tmp/eT58XuryZw.o  
Enter a message to encrypt: vaishnavi  
Enter the key: 4  
Encrypted message: zemwlrezm  
=== Code Execution Successful ===|
```

Result: