EXP NO :1 **DATE:02/02/2024**

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.

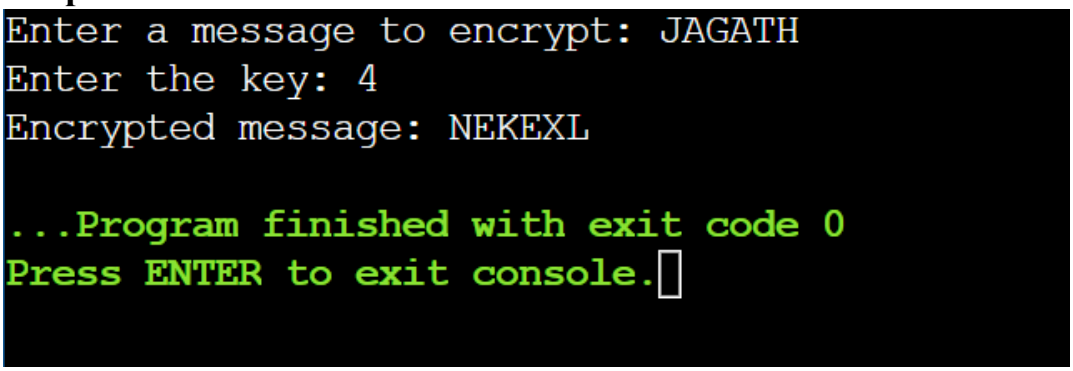
Program:

```
#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:



Result:

The c program to implement encryption algorithm using Caesar cipher has been executed successfully.