

**EXP NO :1**

**DATE :2/2/24**

## **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';
```

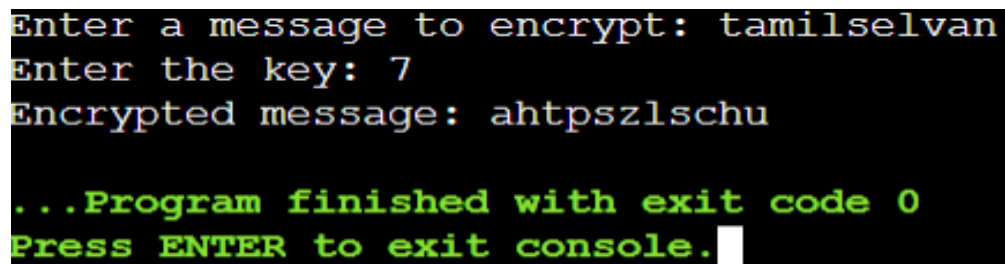
```
    else if ('0' <= ch && ch <= '9')
        ch = (ch - '0' + key) % 10 + '0';

    text[i] = ch;
}

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

return 0;
}
```

### Output:



```
Enter a message to encrypt: tamilselvan
Enter the key: 7
Encrypted message: ahttpszlschu

...Program finished with exit code 0
Press ENTER to exit console.
```

### Result:

Thus the c program implement encryption algorithm using Caesar Cipher technique was executed successfully.