

**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')
```

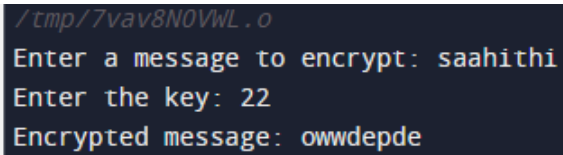
```
        ch = (ch - 'A' + key) % 26 + 'A';
    else if ('0' <= ch && ch <= '9')
        ch = (ch - '0' + key) % 10 + '0';

    text[i] = ch;
}

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

return 0;
}
```

### Output:

A terminal window with a dark background. The first line shows a file path in red: /tmp/7vav8N0VWL.o. The next three lines are in white: 'Enter a message to encrypt: saahithi', 'Enter the key: 22', and 'Encrypted message: owwdepde'.

```
/tmp/7vav8N0VWL.o
Enter a message to encrypt: saahithi
Enter the key: 22
Encrypted message: owwdepde
```

### Result: