

**Date:****AIM:**

To implement encryption and decryption in Caesar Cipher technique.

**ALGORITHM:**

1. Declare two arrays to store plaintext and ciphertext
2. Prompt the user to enter plaintext
3. Loop till the end-of line marker comes
  - a. get one plaintext character & put the same in plaintext[] array and increment i
  - b. apply caesar 3 key shift cipher on the character and store in ciphertext[] array and increment x.
4. Print the ciphertext

**PROGRAM CODE:**

```
#include <stdio.h>
int main()
{
    char plaintext[100]={0}, ciphertext[100]={0};
    int c;
    printf("Plaintext:");
    while((c=getchar()) != '\n')
    {
        static int x=0, i=0;
        plaintext[i++]=(char)c;
        ciphertext[x++]=(char)(c+3);
    }
    printf("Cipher text:");
    printf("%s\n",ciphertext);
    return 0;
}
```

**OUTPUT:**

```
[root@localhost-live liveuser]# vi caesar.c
[root@localhost-live liveuser]# cc caesar.c
[root@localhost-live liveuser]# ./a.out
Plaintext:hello
Cipher text:khoor
[root@localhost-live liveuser]#
```

**RESULT:**