Character stuffing:

In character stuffing the input string will be given to the layer then two character strings will be attached at beginning and ending of the input string and will be sent through transmitter

In case if the input string includes the string which is the beginning string(we attach at the beginning) then we insert another beginning string before the actual occurrence in the input string)

Example:

1. Input string

Sudhir is a good boy and bad boy

2. After character stuffing with LOCK and UNLOCK as beginning and ending strings we attach It'll be

LOCK Sudhir is a good boy and bad boyUNLOCK

In case if input string is like this

1. Input string

Sudhir is LOCKED by divs

2.After stuffing it must be

LOCKSudhir is LOCKLOCKED by divsUNLOCK

This explanation is enough to tell how i approached to write a C program on this.

! Urgent

```c
/*      Program name: Character Stuffing

        Auther : Sudhir                    */

#include<stdio.h>

#include<conio.h>

#include<string.h>

char b[]="LOCK",e[]="UNLOCK"; //Starting and ending strings which will be stuffed

void main()

{

int i,j,k,l;

char s[44],tmp[66],s1[60];

clrscr();

prinft("Enter the input string");

gets(s);

strcpy(tmp,b); //Stuffing the starting string

strcat(tmp,s);//Adding the input string

l=strlen(tmp);//Length of the string tmp

for(i=4;i<l;) //i=4 because we already stuffed starting string so scanning should start with next letters

{

if(tmp[i]=='L'&& tmp[i+1]=='O'&& tmp[i+2]=='C'&& tmp[i+3]=='K')

{

j=0;k=i;

while((j<l-i)&&(k<l))

{

s1[]="";/*New string S1 stores the characters from i value to end once the if condition above succeeds */

s1[j]=tmp[k];//Storing into S1

tmp[k]='\0';//emptying up the tmp string after the occurrence of LOCK

}
```

```c
strcat(tmp,b);//Stuffing the string

strcat(tmp,s1);//Replacing the characters after stuffing

}

i=i+8;/*i value incremented because we first check one LOCK 4 letters and stuffed LOCK 4 letters
becomes 8 so the next scan should start after the stuffing */

l=l+4;//We stuff 4 characters extra so increasing length to 4

}

strcat(tmp,e);//Stuffing the ending string

printf("The string after encoding is");

puts(tmp);

getch();

}
```

This information is enough to explain the program and please find out errors