1)	Implement Data link Layer Framing Methods such as Bit Stuffing &Character Stuffing.

i)Program to implement Bit Stuffing

PROGRAM:
```c
#include<stdio.h>
#include<string.h>
#include<conio.h>
#include<mem.h>
void main()
{
char s[50],flg[8];
int i,j,len=0,c=0;
clrscr();
memset(s,0,sizeof(s));
printf("enter the flag\n");
gets(flg);
printf("enter the bit stream\n");
gets(s);
len=strlen(s);
//printf("the length is %d",len);
for(i=0;i<len;i++)
{
if(s[i]=='1')
{
c++;
if(c==5)
{
for(j=len;j>i+1;j--)
s[j]=s[j-1];
s[i+1]='0';
c=0;
len++;
}
}
else
c=0;
}
printf("\n the transmitted frame is %s %s %s",flg,s,flg);
/*````````````````bit destuffing``````````````````````````````*/
getch();
}
```

OUTPUT
Enter the flag
01111110
Enter the bit stream
01111110
The transmitted frame is 01111110 011111010 01111110
ii) Program to implement Character Stuffing.
PROGRAM:
```c
#include<string.h>
#include<conio.h>
main()
{
char s[30],s2[30];
int i=0,j=0,k=0;
```

```c
clrscr();
memset(s,0,sizeof(s));
memset(s2,0,sizeof(s2));
puts("Enter String");
gets(s);
while(s[i]!='\0')
{
if((s[i]=='d')&&(s[i+1]=='l')&&(s[i+2]=='e'))
{
 j=i+3;
 k=0;
 while(s[j]!='\0')
 {
 s2[k]=s[j];
 k++;
 j++;
 }
s[i+3]='d';
s[i+4]='l';
s[i+5]='e';
s[i+6]='\0';
strcat(s,s2);
memset(s2,0,sizeof(s2));
i=i+6;
}
else
i++;
}
printf("The Frame is dle stx %s dle etx",s);
getch();
}
OUTPUT
Enter String
dle vvit dle
The Frame is dle stx dledle vvit dledle dle etx
```