*#.......................STUFFING...................  
print*("Bit Stuffing\n")  
l=[]  
s = *input*("Enter msg\n")  
*for* i *in* s:l+=i  
  
*for* i *in range*(*len*(l)-4):  
 *if* l[i]=="1" *and* l[i+1]=="1"*and* l[i+2]=="1"*and* l[i+3]=="1"*and* l[i+4]=="1":  
 l.insert(i+5,"0")  
*print*("Output after Bit Stuffing:",''.join(l))  
  
*print*("\nCharacter Stuffing\n")  
t = *input*("Enter the msg\n")  
flag = *input*("Enter flag\n")  
*#t=t.replace(" ","")*esc = *input*("Enter Escape Character")  
l=[]  
*for* i *in* t:l+=i  
  
*for* i *in range*(*len*(l)):  
 *if* l[i] ==esc:  
 l[i]=esc+esc  
  
*for* i *in range*(*len*(l)):  
 *if* l[i] ==flag:  
 l[i]=esc+flag  
*print*("Output after character stuffing",''.join(l))  
  
*#....................DESTUFFING.....................  
  
print*("\nBit Destuffing")  
msg = *input*("\nEnter msg for destuffing\n")  
l=[]  
*for* i *in* msg:l+=i  
  
*for* i *in range*(*len*(l)-5):  
 *if* l[i]=="1" *and* l[i+1]=="1"*and* l[i+2]=="1"*and* l[i+3]=="1"*and* l[i+4]=="1" *and* l[i+5]=="0":  
 l[i+5]=""  
*print*("\nOutput after Bit Destuffing",''.join(l))  
  
*print*("\nCharacter Destuffing\n")  
msg = *input*("\nEnter msg to be destuffed\n")*#"sjdbf&qksdb&qk"#*flag = *input*("Enter flag:\n")*#"q"#*esc = *input*("Enter Escape Character\n")*#"&"#*l=[]  
*for* i *in* msg:l+=i  
e = esc\*2  
f = esc + flag  
  
*for* i *in range*(*len*(l)):  
 *if* l[i] ==esc *and* l[i+1]==esc:  
 l[i]=""  
  
*for* i *in range*(*len*(l)):  
 *if* l[i] ==esc *and* l[i+1]==flag:  
 l[i]=""  
*print*("\nOutput after character Destuffing",''.join(l))  
  
"""  
  
vedant@kingsmanvk-predator-g3-572:~$ python3 cn3.py  
Bit Stuffing  
  
Enter msg  
01111011111001101  
Output after Bit Stuffing: 011110111110001101  
  
Character Stuffing  
  
Enter the msg  
hello we will meet tomorrow  
Enter flag  
o  
Enter Escape Character$  
Output after character stuffing hell$o we will meet t$om$orr$ow  
  
Bit Destuffing  
  
Enter msg for destuffing  
011110111110001101  
  
Output after Bit Destuffing 01111011111001101  
  
Character Destuffing  
  
Enter msg to be destuffed  
hell$o we will meet t$om$orr$ow  
Enter flag:  
o  
Enter Escape Character  
$  
  
Output after character Destuffing hello we will meet tomorrow  
  
"""