Practical no. 5 B : Program to demonstrate Bit Stuffing Framing technique
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Program

```c
#include  <stdio.h>
#include <stdlib.h>
#include <string.h>

int main(){

        char data[50], stuff[50], dstuff[50];
        int i, j, cnt, len;
        system("clear");

        printf("Enter Data:\n");
        scanf("%s",data);

        len=strlen(data);
        cnt=0,j=0;

        for (int i = 0; i < len; i++){

                if(data[i]=="1"){
                        cnt++;
                }
                else{
                        cnt=0;
                }
                stuff[j]=data[i];
                j++;

                if(cnt==5 && data[i+1]=="1"){
                        stuff[j]='0';
                        j++;
                        cnt=0;
                }
```

```c
        }
        stuff[j]='\0';
        printf("Stuffed data at intermediate site is :\n 01111110 %s 01111110 \n", stuff);

// destuffing

        len=strlen(stuff);
        cnt=0,j=0;

        for (int i = 0; i < len; i++){
                if(stuff[i=="1"]){
                        cnt++;
                }
                else{
                        cnt=0;
                }
                dstuff[j]=stuff[i];
                j++;

                if(cnt==5 && stuff[i]=='0'){
                        cnt=0;
                        i++;
                }
        }
        dstuff[j]='\0';

        printf("\n\nDestuffed data : %s \n\",dstuff);

        return 0;
}
```

Output:

```
Enter Data:
01111111101111110111111
Stuffed data at intermediate site is :
 01111110 01111111101111110111111 01111110


Destuffed data : 01111111101111110111111
```

```
Enter Data:
01110110111101111101
Stuffed data at intermediate site is :
 01111110 01110110111101111101 01111110


Destuffed data : 01110101111011111101
```