

Write a program to implement bit stuffing :

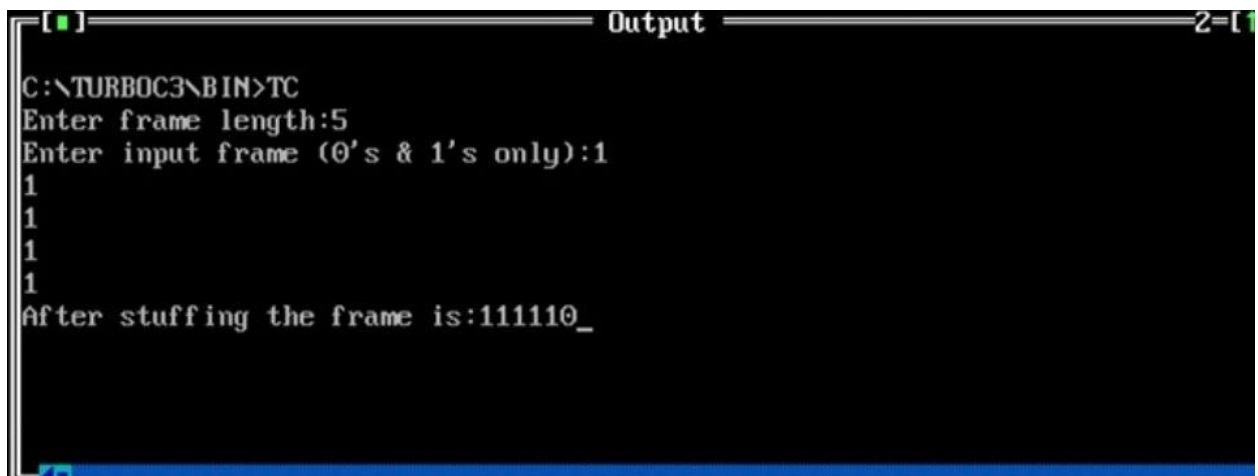
```
#include<stdio.h>
#include<string.h>
int main()
{
    int a[20],b[30],i,j,k,count,n;
    printf("Enter frame size (Example: 8):");
    scanf("%d",&n);
    printf("Enter the frame in the form of 0 and 1 :");
    for(i=0; i<n; i++)
        scanf("%d",&a[i]);
    i=0;
    count=1;
    j=0;
    while(i<n)
    {
        if(a[i]==1)
        {
            b[j]=a[i];
            for(k=i+1; a[k]==1 && k<n && count<5; k++)
            {
                j++;
                b[j]=a[k];
                count++;
            }
            if(count==5)
            {
                j++;
                b[j]=0;
            }
        }
    }
}
```

```

        i=k;
    }
}
else
{
    b[j]=a[i];
}
i++;
j++;
}
printf("After Bit Stuffing :");
for(i=0; i<j; i++)
    printf("%d",b[i]);
return 0;
}

```

Output :



The screenshot shows a Turbo C++ compiler window titled "Output". The command prompt shows the following sequence of inputs and outputs:

```

C:\TURBOC3\BIN>TC
Enter frame length:5
Enter input frame (0's & 1's only):1
1
1
1
1
After stuffing the frame is:111110_

```

The output demonstrates that for an input frame of five 1s, the stuffed frame is 111110, where the 0 represents the stuffed bit.

Write a program to implement byte stuffing in c

```
#include<stdio.h>
#include<string.h>
Main(){
    Char a[20],b[20];
    Int I,n,j;
    Char f,s;
    Printf("Enter the size of the frame : ");
    Scanf("%d",&n);
    N=n*2;
    Printf("\nEnter the characters in frame : \n");
    For(i=0;i<n;i++)
        Scanf("%c",&a[i]);
    Printf("\n FRAME \n ");
    For(i=0;i<n;i++)
        Printf("%c",a[i]);
    J=0;
    For(i=0;i<n;i++)
    {
        If(a[i]=='f')
        {
            B[j]='s';
            J++;
            B[j]=a[i];

        }
        Else if(a[i]=='s')
        {
            B[j]='s';
```

```

        J++;
        B[j]=a[i];
    }
    Else
        B[j]=a[i];

    J++;
}
Printf("\n RESULT \n");
Printf("f");
For(i=0;i<j;i++)
{
    Printf("\n");
    Printf("%c",b[i]);
}
Printf("\nf");
}

```

Output:

```

11 | main(){
    | ^~~~
Enter the size of the frame : 8

Enter the characters in frame :
10011011
11111111

FRAME
10011011
11111111
RESULT
f

1
0
0
1
1
1
0
1
1

1
1
1
1
1
1
f

```

