Experiment No: 1 (a)

NAME OF THE EXPERIMENT: Bit Stuffing.

AIM: Write a C program to implement the data link layer framing methods such as bit stuffing.

Source Code:

```
#include<stdio.H>
#include<conio.H>
#include<string.h>
void main()
{
  int a[20],b[30],i,j,k,count,n;
  clrscr();
  printf("enter frame length:");
  scanf("%d",&n);
  pritf("enter input frame(0's&1's
only):");
  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 stuffing the frame is:");
 for(i=0;i<j;i++)
printf("%d",b[i]);
getch();
}
```

Output:

Enter the number
of bits: 10
1
0
1
0
1
1
1
1
1
1
Data after stuffing: 10101111101

OUTPUT CONSOLE: