EXPERIMENT - 5

19/10/22 IMPLEMENT CHARACTER COUNT, BIT COUNT

AIM: To implement bit and character stuffing

ALGORITHM: Bit stuffing is inserting one extra zero and adding a flag (01111110) to the beginning and end of frame.

Byte stuffing is inserting flag bytes at start and end of frame and escape sequences before a flag byte in message.

CODE:

Bit stuffing

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
void main()
{ int a[20], b[30], i, j, k, count, n;
printf("enter length of frame:");
scanf("%d", &n);
printf("enter frame:");
```

```
for(i=0;i<n;i++)
scanf("%d",&a[i]);
i=0;
count=1;
j=0;
while(i<n)
{
  if(a[i]==0)
  {
    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++;
  }i++;
}
printf("After stuffing frame is:");
printf("01111110");
for(i=0;i<j;i++)
  printf("%d", b[i]);
printf("01111110");
```

o/p:

enter length of frame: 10

enter frame:

0
1
1
1
1
1
1
1
1
0

After stuffing the frame is

0 1 1 1 1 1 0 0 1 1 1 1 1 0 1 1 1 0 0 1 1 1 1 1 0