#include<stdio.h>

#include<string.h>

#include<stdlib.h>

void sender();

void receiver(int \*message,int l2);

int main(void)

{

sender();

}

void sender()

{

int i,j,n,count=0,zerocounter=0,zero=0;

int msg[50];

int result[50];

printf("Enter the number of bits of the message\n");

scanf("%d",&n);

printf("Enter the bits\n");

for(i=0;i<n;i++)

{

scanf("%d",&msg[i]);

}

result[0]=0;

result[1]=1;

result[2]=1;

result[3]=1;

result[4]=1;

result[5]=1;

result[6]=1;

result[7]=0;

j=8;

for(i=0;i<n;i++)

{

if(msg[i]==0)

{

result[j]=msg[i];

j++;

zero=1;

count=0;

}

else

{

if((count==5)&&(zero==1))

{

result[j]=0;

zerocounter++;

j++;

result[j]=msg[i];

j++;

count=0;

}

else

{

result[j]=msg[i];

j++;

count++;

}

}

}

result[j++]=0;

result[j++]=1;

result[j++]=1;

result[j++]=1;

result[j++]=1;

result[j++]=1;

result[j++]=1;

result[j++]=0;

int l1=16+n+zerocounter;

printf("The length is: %d\n",l1);

printf("The frame is\n");

for(i=0;i<j;i++)

{

printf("%d",result[i]);

}

receiver(result,l1);

}

void receiver(int \*result,int l2)

{

int i,j,counter,l3;

int mesg[100];

l3=l2-8;

j=0;

for(i=8;i<l3;i++)

{

if(result[i]==0)

{

if(counter==5)

{

i++;

mesg[j]=result[i];

j++;

counter=0;

}

else

{

mesg[j]=result[i];

j++;

counter=0;

}

}

else

{

mesg[j]=result[i];

j++;

counter++;

}

}

printf("\nReciever side message is:");

for(i=0;i<j;i++)

{

printf("%d",mesg[i]);

}

}

OUTPUT

Reciever side message is:inchara@inchara-VirtualBox:~$ ./a.out

Enter the number of bits of the message

8

Enter the bits

0 1 1 1 1 1 1 0

The length is: 25

The frame is

0111111001111101001111110

