Experiment 2

Write a program for a HLDC frame to perform bit stuffing and de-stuffing in a single frame

Program:

#include<stdio.h>

#include<string.h>

#include<conio.h>

void main()

{

{

char ch,arr[50]={"01111110"},rec[50];

int i,j,k,len=8,cnt=0;

printf("\n Enter the data:\n");

while((ch=getche())!='\r')

{

if(ch=='1')

cnt++;

else

cnt=0;

arr[len++]=ch;

if(cnt==5)

{

arr[len++]='0';

cnt=0;

}

}

strcat(arr,"01111110");

printf("\n Bit stuffed stream is:\n");

for(i=0;i<len+8;i++)

printf("%c",arr[i]);

cnt=0;

printf("\n The destuffed stream is:\n");

for(j=8,k=0;j<len;j++)

{

if(arr[j]=='1')

cnt++;

else

cnt=0;

rec[k++]=arr[j];

if(cnt==5&&arr[j+1]=='0')

{

j++;

cnt=0;

}

}

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

printf("%c",rec[j]);

}

getch();

}

Output:

(Bit stuffing and de-stuffing)

