Experiment No: 1(c)

NAME OF THE EXPERIMENT: Character Count

AIM: Write a C program to implement data link layer framing method character count.

Source Code:

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
char data[20][20];
int n;
void main()
{
int i,ch,j;
char tmp[20][20];
clrscr();
printf("Enter the number of frames:");
scanf("%d",&n);
for(i=0;i<=n;i++)
{
if(i!=0)
{
printf("frame%d:",i);
fflush(stdin);
gets(data[i]);
}
}
/*saving frame with count and data*/
for(i=0;i<=n;i++)
{
tmp[i][0]=49+strlen(data[i]);
tmp[i][1]='\0';
```

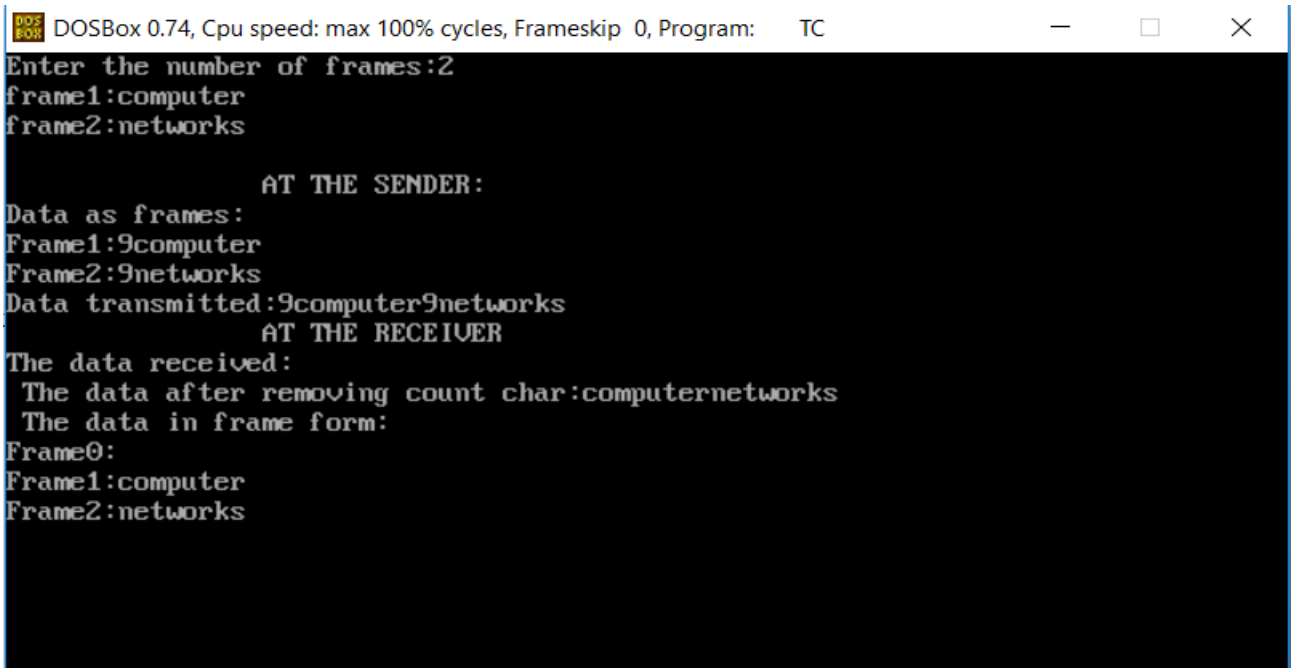
```
strcat(tmp[i],data[i]);
}
printf("\n\t\tAT THE SENDER:\n");

printf("Data as frames:\n");
for(i=1;i<=n;i++)
{
printf("Frame%d:",i);
puts(tmp[i]);
}
printf("Data transmitted:");
for(i=1;i<=n;i++)
printf("%s",tmp[i]);
printf("\n\t\tAT THE RECEIVER\n");
printf("The data received:");
for(i=1;i<=n;i++)
{
ch=(int)(tmp[i][0]-49);
for(j=1;j<=ch;j++)
data[i][j-1]=tmp[i][j];
data[i][j-1]='\0';
}
printf("\n The data after removing count char:");
for(i=1;i<=n;i++)
printf("%s",data[i]);
printf("\n The data in frame form:\n");
for(i=1;i<=n;i++)
{
printf("Frame%d:",i);
puts(data[i]);
}
```

```
getch();
}
```

OUTPUT:

```
Enter the no. Of frames: 2
Frame1: computer
Frame2: networks
AT THE SENDER
Data as frames:
Frame1:9computer
Frame2:9networks
Data transmitted :9computer9networks
AT THE RECEIVER
The data received.
The data after removing count char: computer networks
The data in frame form:
Frame1: computer
Frame2: networks
```

OURPUT CONSOLE:


DOSBox 0.74, Cpu speed: max 100% cycles, Frameskip 0, Program: TC
Enter the number of frames:2
frame1:computer
frame2:networks
AT THE SENDER:
Data as frames:
Frame1:9computer
Frame2:9networks
Data transmitted:9computer9networks
AT THE RECEIVER
The data received:
The data after removing count char:computernetworks
The data in frame form:
Frame0:
Frame1:computer
Frame2:networks