SOURCE CODE: 01

```
#include<iostream.h>
#include<bios.h>
#include<conio.h>
#define COM1 0
#define DATA_READY 0X100
#define SETTINGS (0x80|0x02|0x00|0x00)
int main(void)
{
int in, out, status;
clrscr();
bioscom(0,SETTINGS,COM1);
cprintf("...Bioscom[Esc] to exit...");
cprintf("\nData sent to you:");;
while(1)
{
status=bioscom(3,0,COM1);
cout<<status<<endl;
if(status & DATA_READY )
if((out=bioscom(2,0,COM1) & 0x7F)!=0)
putch(out);
//if(kbhit())
if(1)
{
cprintf("Enter Data to sent:");
if((in=getch())==27)
break;
//cout<<"\n";
putch(in);
bioscom(1,in,COM1);
cout<<"\ndata sent\n";
}
}
return 0;
}
```

Source Code: 02

```
#include<stdio.h>
#include<iostream.h>
#include<bios.h>
#include<graphics.h>
#include<stdlib.h>
#include<conio.h>
#define COM1 0
#define DATA_READY 0X100
#define SETTINGS (0x80|0x02|0x00|0x00)
void clr_scr()
{
clrscr();
 /* request auto detection */
int gdriver = DETECT, gmode, errorcode;

/* initialize graphics mode */
initgraph(&gdriver, &gmode, "C:\\TC\BGI");

/* read result of initialization */
errorcode = graphresult();

if (errorcode != grOk)  /* an error occurred */
{
   printf("Graphics error: %s\n", grapherrormsg(errorcode));
   printf("Press any key to halt:");
   getch();
   exit(1);             /* return with error code */
}
}
void chat_window()
{
setcolor(2);
settextstyle(10,0,2);
outtextxy(95,12,"...Bioscom[Esc] to exit...");
setcolor(1);
 outtextxy(215,95,"Transmitted Data");
 gotoxy(15,9);printf(">");
 gotoxy(15,10);printf(">");
 gotoxy(15,11);printf(">");
 gotoxy(15,12);printf(">");
 gotoxy(15,13);printf(">");
 gotoxy(14,14);printf("--->");
 setcolor(1);
 rectangle(95,287,535,422);
 rectangle(98,317,532,419);
 setcolor(6);
 settextstyle(7,0,2);
 outtextxy(240,287,"Received Data");
 gotoxy(15,21);printf(">");
 gotoxy(15,22);printf(">");
 gotoxy(15,23);printf(">");
 gotoxy(15,24);printf(">");
 gotoxy(15,25);printf(">");
 gotoxy(14,26);printf("--->");
 }
```

```
int main()
{
clr_scr();
char transmit[5][51]={'\0'};
char receive[5][51]={'\0'};
char blank[51]={"                                                  "};
int in, out, status,i,j,t,r;
i=j=t=r=0;
chat_window();
bioscom(0,SETTINGS,COM1);
while(in!=27)
{
/*******Data Receiving Block******/
status=bioscom(3,0,COM1);
if(status & DATA_READY )
if((out=bioscom(2,0,COM1) & 0x7F)!=0)
if(r<50 && out!='\r')
{
if(out==8 && r>0)
{

  r--;
  gotoxy(16+r,26);
  putchar(' ');
  }
  else
  {
  gotoxy(16+r,26);
  putchar(out);
  receive[4-j][r++]=char(out);
  }
  }
  else
  {
  receive[4-j][r]='\0';
  r=0;
  gotoxy(16,21);printf("%s",blank);
  gotoxy(16,21);
  printf("%s",receive[(8-j)%5]);
  gotoxy(16,22);printf("%s",blank);
  gotoxy(16,22);
  printf("%s",receive[(7-j)%5]);
  gotoxy(16,23);printf("%s",blank);
  gotoxy(16,23);
  printf("%s",receive[(6-j)%5]);
  gotoxy(16,24);printf("%s",blank);
  gotoxy(16,24);
  printf("%s",receive[(5-j)%5]);
  gotoxy(16,25);printf("%s",blank);
  gotoxy(16,25);
  printf("%s",receive[(4-j)%5]);
  gotoxy(16,26);printf("%s",blank);
```

```
j=(j+1)%5;
}
if(kbhit())
{
in=getch();
bioscom(1,in,COM1);
if(t<50 && in!='\r' && in!=27)
{
if(in==8 && t>0)

{
t--;
gotoxy(16+t,14);
putchar(' ');
}
else
{
gotoxy(16+t,14);
putchar(in);
transmit[4-i][t++]=char(in);
}
}
else if (in!=27)
{
transmit[4-i][t]='\0';
t=0;
gotoxy(16,9);printf("%s",blank);
gotoxy(16,9);
printf("%s",transmit[(8-i)%5]);
gotoxy(16,10);printf("%s",blank);
gotoxy(16,10);
printf("%s",transmit[(7-i)%5]);
gotoxy(16,11);printf("%s",blank);
gotoxy(16,10);printf("%s",blank);
gotoxy(16,10);
printf("%s",transmit[(7-i)%5]);
gotoxy(16,11);printf("%s",blank);
gotoxy(16,11);
printf("%s",transmit[(6-i)%5]);
gotoxy(16,12);printf("%s",blank);
gotoxy(16,12);
printf("%s",transmit[(5-i)%5]);
gotoxy(16,13);printf("%s",blank);
gotoxy(16,13);
printf("%s",transmit[(4-i)%5]);
gotoxy(16,14);printf("%s",blank);
i=(i+1)%5;
}
}
}
/*clean up*/
closegraph();
return 0;
}
```