

```

for(i=0;i<rs;i++)
    cout<<rrem[i];
libr
int flag=0;
for(i=0;i<rs;i++){
    if(rrem[i]!=0)
        flag=1;
}

if(flag==0)
    cout<<"\n\nMessage transmitted from Sender to Receiver is correct";

else{
    cout<<"\n\nMessage transmitted from Sender to Receiver contains ERROR!\n Re-transmit the
data ";
    goto label;
}

return 0;
}

```

The screenshot shows a C++ program running in a terminal window. The program prompts the user to enter the size of data and the data itself. It then prompts for the key size and the key. The program calculates the CRC bits and displays the transmitted frame, the received frame, and the remainder. The output confirms that the message transmitted from the sender to the receiver is correct.

```

(base) pratt3000@pratts-laptop ~/Downloads: ./a.out
Enter Size of data: 6
Enter data:1
0
0
1
0
0

Enter key size: 4
Enter key:1
0
0
1
1

Sender:
data: 100100
key :1001
0's to append: 3
after appending 0's :100100000
CRC bits: 000
Transmitted Frame: 100100000
Receiver side :
Received Frame: 100100000
Remainder: 000
Remainder = 0, Message Transmitted from Sender to Receiver is correct
(base) pratt3000@pratts-laptop ~/Downloads:

```

```
Activities Text Editor Fri Sep 25 11:33 AM CNL_A2.cpp ~/Downloads
File Browser Open
66 cout<<"\nTransmitted Frame: ";
Received Frame: 100100000
Remainder: 000
Remainder = 0, Message Transmitted from Sender to Receiver is correct
(base) pratt3000@pratts-laptop ~/Downloads g++ CNL_A2.cpp
(base) pratt3000@pratts-laptop ~/Downloads ./a.out

**CRC**

Size of data: 6
data:1
1
1

1
1
0

key size: 4
Enter key:1
0
0
1

**Sender**
Data: 111110
Key: 1001
No. 0's to be appended: 3
Message after appending :111110000
CRC bits: 001
Transmitted Frame: 111110001

**Receiver**
Received Frame: 1
1
1
1

Terminal C++ Tab Width: 8 Ln 88, Col 15 INS
```

```
Activities Text Editor Fri Sep 25 11:33 AM CNL_A2.cpp ~/Downloads
File Browser Open
66 cout<<"\nTransmitted Frame: ";
1
1
0
key size: 4
Enter key:1
0
0
1

**Sender**
Data: 111110
Key: 1001
No. 0's to be appended: 3
Message after appending :111110000
CRC bits: 001
Transmitted Frame: 111110001

**Receiver**
Received Frame: 1
1
1
1
1
1
1
1
1
Remainder: 111

Message transmitted from Sender to Receiver contains ERROR!
Re-transmit the data
Received Frame:

Terminal C++ Tab Width: 8 Ln 88, Col 15 INS
```