

Sliding Window Sender :

```
import java.io.*;

import java.net.*;

public class SlidingWindow_Sender

{

    public static void main(String a[]) throws Exception

    {

        ServerSocket ser = new ServerSocket(10);

        Socket s = ser.accept();

        BufferedReader in = new BufferedReader(new InputStreamReader(System.in));

        BufferedReader in1 = new BufferedReader(new InputStreamReader(s.getInputStream()));

        String sbuff[] = new String[8];

        PrintStream p;

        int sptr = 0, sws = 8, nf, ano, i;

        String ch;

        do {

            p = new PrintStream(s.getOutputStream());

            System.out.print("Enter the no. of frames : ");

            nf = Integer.parseInt(in.readLine());

            p.println(nf);

            if (nf <= sws - 1) {

                System.out.println("Enter " + nf + " Messages to be send\n");

                for (i = 1; i <= nf; i++) {

                    sbuff[sptr] = in.readLine();

                    p.println(sbuff[sptr]);

                    sptr = ++sptr % 8;

                }

                sws -= nf;

                System.out.print("Acknowledgment received");
```

```
        ano = Integer.parseInt(in1.readLine());

        System.out.println(" for " + ano + " frames");

        sws += nf;
    }
    else {
        System.out.println("The no. of frames exceeds window size");

        break;
    }

    System.out.print("\nDo you want to send some more frames : ");

    ch = in.readLine();

    p.println(ch);
}

while (ch.equals("yes"));

s.close();
}
}
```



Command Prompt



```
C:\Users\poove\OneDrive\Desktop\NC_Output>java SlidingWindow_Sender
```

```
Enter the no. of frames : 7
```

```
Enter 7 Messages to be send
```

```
Raman
```

```
SeithaPore
```

```
Sethai
```

```
Kakathane
```

```
Aanal
```

```
Yenna
```

```
PorIthu
```

```
Acknowledgment received for 7 frames
```

```
Do you want to send some more frames : no
```

```
C:\Users\poove\OneDrive\Desktop\NC_Output>S
```

Sliding Window Receiver :

```
import java.net.*;

import java.io.*;

class SlidingWindow_Receiver
{
    public static void main(String a[]) throws Exception
    {
        Socket s = new Socket(InetAddress.getLocalHost(), 10);

        BufferedReader in = new BufferedReader(new InputStreamReader(s.getInputStream()));

        PrintStream p = new PrintStream(s.getOutputStream());

        int i = 0, rptr = -1, nf, rws = 8;

        String rbuf[] = new String[8];

        String ch;

        System.out.println();

        do {
            nf = Integer.parseInt(in.readLine());

            if (nf <= rws - 1) {
                for (i = 1; i <= nf; i++) {
                    rptr = ++rptr % 8;

                    rbuf[rptr] = in.readLine();

                    System.out.println("The received Frame " + rptr + " is : " + rbuf[rptr]);
                }

                rws -= nf;

                System.out.println("\nAcknowledgment sent\n");

                p.println(rptr + 1);

                rws += nf;
            }
        }
```

```
    else
        break;
    ch = in.readLine();
}
while (ch.equals("yes"));
}
}
```

Command Prompt

```
C:\Users\poove\OneDrive\Desktop\NC_Output>java SlidingWindow_Receiver
```

```
The received Frame 0 is : Raman  
The received Frame 1 is : SeithaPore  
The received Frame 2 is : Sethai  
The received Frame 3 is : Kakathane  
The received Frame 4 is : Aanal  
The received Frame 5 is : Yenna  
The received Frame 6 is : PorIthu
```

```
Acknowledgment sent
```

```
C:\Users\poove\OneDrive\Desktop\NC_Output>7  
'7' is not recognized as an internal or external command,  
operable program or batch file.
```

```
C:\Users\poove\OneDrive\Desktop\NC_Output>|
```