

## Sliding Window

### Sender:

```
import java.net.*;
import java.io.*;
public class slidsender {
    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();
} }

```

### **Receiver:**

```

import java.net.*;
import java.io.*;
class slidreceiver {
    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"));
    } }

```