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## ASSIGNMENT 5: STOP AND WAIT

## Sender.java:

package Assignment8;

import java.io.\*;

import java.net.\*;

import java.util.\*;

public class Sender{

    public static void main(String args[]) throws Exception{

        Sender sws = new Sender();

        sws.run();

    }

    public void run() throws Exception{

        Scanner sc=new Scanner(System.in);

        System.out.println("Enter no. of frames to be sent: ");

        int n=sc.nextInt();

        Socket myskt = new Socket("localhost",4444);

        PrintStream myps = new PrintStream(myskt.getOutputStream());

        for(int i=0;i<=n;){

            if(i==n){

                myps.println("exit");

                break;

            }

            System.out.println("Frame no. "+ i +" has been sent.");

            myps.println(i);

            BufferedReader bf = new BufferedReader(new InputStreamReader(myskt.getInputStream()));

            String ack = bf.readLine();

            if(ack!=null){

                System.out.println("Acknowledgement Received!\n");

                i++;

                Thread.sleep(4000);

            }

            else{

                myps.println(i);

            }

        }

        myskt.close();

        sc.close();

    }

**Receiver.java:**

package Assignment8;

import java.io.\*;

import java.net.\*;

public class Receiver{

    public static void main(String args[])throws Exception{

        Receiver swr = new Receiver();

        swr.run();

    }

    public void run() throws Exception{

        String temp ="Any message",str="exit";

        ServerSocket myss =new ServerSocket(4444);

        Socket ss\_accept = myss.accept();

        BufferedReader ss\_bf = new BufferedReader(new InputStreamReader(ss\_accept.getInputStream()));

        PrintStream myps = new PrintStream(ss\_accept.getOutputStream());

        while(temp.compareTo(str)!=0){

            Thread.sleep(1000);

            temp = ss\_bf.readLine();

            if(temp.compareTo(str)==0){

                break;

            }

            System.out.println("Frame "+temp+" was received.");

            Thread.sleep(500);

            myps.println("Received");

        }

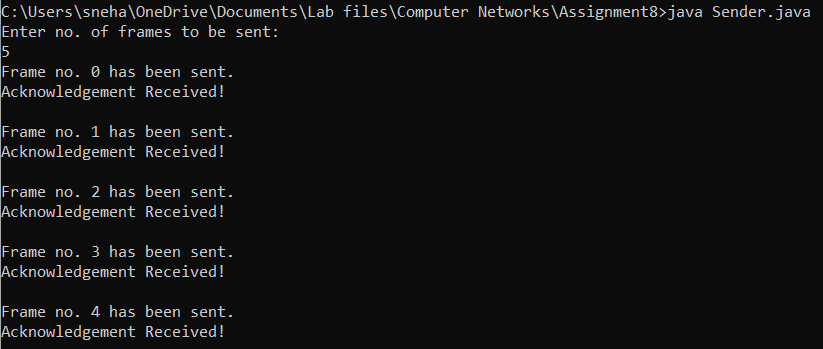
        System.out.println("All Frames were received SUCCESSFULLY !!");

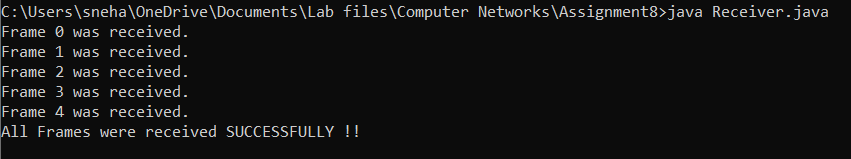
        myss.close();

    }

}

**Output:**

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**----------------------------------------------------------------**