**//UDP ECHOSERVER program**

import java.net.\*;

import java.io.\*;

public class EchoServer

{

//Initialize Port number and Packet Size

static final int serverPort = 1026;

static final int packetSize = 1024;

public static void main(String args[])

throws SocketException{

DatagramPacket packet;

DatagramSocket socket;

byte[] data; // For data to be

Sent in packets

int clientPort;

InetAddress address;

String str;

socket = new DatagramSocket(serverPort);

for(;;){

data = new byte[packetSize];

// Create packets to receive the message

packet = new DatagramPacket(data,packetSize);

System.out.println("Waiting to receive

the packets");

try{

// wait infinetely for arrive of the packet

socket.receive(packet);

}catch(IOException ie)

{

System.out.println(" Could not Receive

:"+ie.getMessage());

System.exit(0);

}

// get data about client in order to

echo data back

address = packet.getAddress();

clientPort = packet.getPort();

// print string that was received

on server's console

str = new String(data,0,0,packet.getLength());

System.out.println("Message :"+ str.trim());

System.out.println("From :"+address);

// echo data back to the client

// Create packets to send to the client

packet = new DatagramPacket(data,packetSize,address,clientPort);

try

{

// sends packet

socket.send(packet);

}

catch(IOException ex)

{

System.out.println("Could not Send

"+ex.getMessage());

System.exit(0);

}

} // for loop

} // main

} // class EchoServer

**//UDP ECHOCLIENT program**

import java.net.\*;

import java.io.\*;

public class EchoClient{

static final int serverPort = 1026;

static final int packetSize = 1024;

public static void main(String args[]) throws

UnknownHostException, SocketException{

DatagramSocket socket; //How we send packets

DatagramPacket packet; //what we send it in

InetAddress address; //Where to send

String messageSend; //Message to be send

String messageReturn; //What we get back

byte[] data;

//Checks for the arguments that sent to

//the java interpreter

// Make sure command line parameters correctr

if(args.length != 2)

{

System.out.println("Usage Error :Java EchoClient < Server name> < Message>");

System.exit(0);

}

// Gets the IP address of the Server

address = InetAddress.getByName(args[0]);

socket = new DatagramSocket();

data = new byte[packetSize];

messageSend = new String(args[1]);

messageSend.getBytes

(0,messageSend.length(),data,0);

// remember datagrams hold bytes

packet = new

DatagramPacket(data,data.length,address,serverPort);

System.out.println(" Trying to Send the packet ");

try

{

// sends the packet

socket.send(packet);

}

catch(IOException ie)

{

System.out.println("Could not Send :"+ie.getMessage());

System.exit(0);

}

packet = new DatagramPacket(data,data.length);

try

{

// Receives the packet from the server

socket.receive(packet);

}

catch(IOException iee)

{

System.out.println("Could not receive :"+iee.getMessage() );

System.exit(0);

}

// display message received

messageReturn = new String (packet.getData(),0);

System.out.println("Message Returned : "+

messageReturn.trim());

} // main