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JAVA PROGRAM TO DEMONSTRATE MULTICAST USING UDP:

Receive.java:

// Multicast Program That Receives Multicast Messages

import java.net.DatagramPacket;

import java.net.InetAddress;

import java.net.MulticastSocket;

public class Receive {

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

int mcPort = 12345;

String mcIPStr = "230.1.1.1";

MulticastSocket mcSocket = null;

InetAddress mcIPAddress = null;

mcIPAddress = InetAddress.getByName(mcIPStr);

mcSocket = new MulticastSocket(mcPort);

System.out.println("Multicast Receiver running at:"

+ mcSocket.getLocalSocketAddress());

mcSocket.joinGroup(mcIPAddress);

DatagramPacket packet = new DatagramPacket(new byte[1024], 1024);

System.out.println("Waiting for a multicast message...");

mcSocket.receive(packet);

String msg = new String(packet.getData(), packet.getOffset(),

packet.getLength());

System.out.println("[Multicast Receiver] Received:" + msg);

mcSocket.leaveGroup(mcIPAddress);

mcSocket.close();

}

}

Send.java:

// Multicast Program That Sends Multicast Messages

import java.net.DatagramPacket;

import java.net.DatagramSocket;

import java.net.InetAddress;

public class Send {

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

int mcPort = 12345;

String mcIPStr = "230.1.1.1";

DatagramSocket udpSocket = new DatagramSocket();

InetAddress mcIPAddress = InetAddress.getByName(mcIPStr);

byte[] msg = "Hello".getBytes();

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

packet.setAddress(mcIPAddress);

packet.setPort(mcPort);

udpSocket.send(packet);

System.out.println("Sent a multicast message.");

System.out.println("Exiting application");

udpSocket.close();

}

}

Output:



