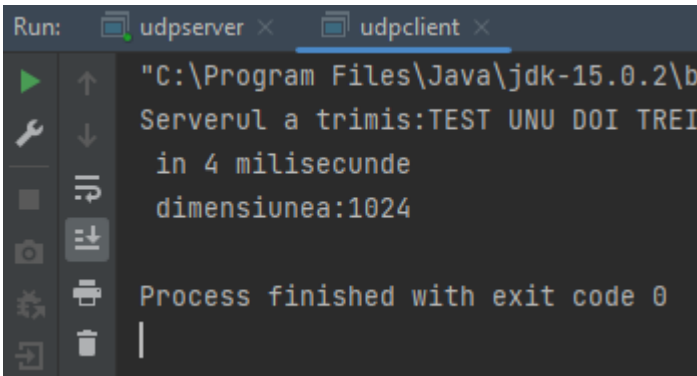
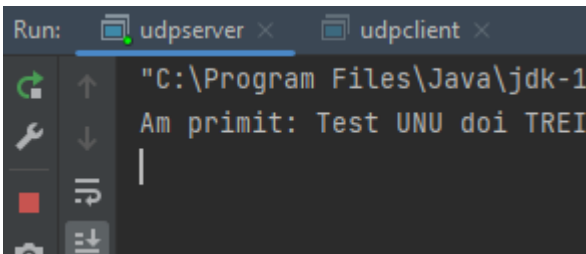


Tema 2



```
Run: udpservice x udpcient x
"C:\Program Files\Java\jdk-15.0.2\b
Serverul a trimis:TEST UNU DOI TREI
in 4 milisecunde
dimensiunea:1024
Process finished with exit code 0
```



```
Run: udpservice x udpcient x
"C:\Program Files\Java\jdk-15.0.2\b
Am primit: Test UNU doi TREI
```

Folosind Datagram Sockets am creat un server care foloseste comunicatii udp in loc de tcp si am conectat clientul la server, apoi folosind DatagramPacket primesc si trimit date, la care le calculez timpul si dimensiunea.

CLIENT

```
package org.example;

import java.io.BufferedReader;
import java.io.InputStreamReader;
import java.net.DatagramPacket;
import java.net.DatagramSocket;
import java.net.InetAddress;
import java.util.Date;

class udpcient {
    public static void main(String args[]) throws Exception {
        // BufferedReader inFromUser = new BufferedReader(new
        InputStreamReader(System.in));
        DatagramSocket clientSocket = new DatagramSocket();
        InetAddress IPAddress = InetAddress.getByName("localhost"); //ip-ul
        calculatoruui
        byte[] sendData;
        byte[] receiveData = new byte[1024];
        String sentence = "Test UNU doi TREI";
        sendData = sentence.getBytes();
```

```

        Date date = new Date();
        long time1 = date.getTime();

        DatagramPacket sendPacket = new DatagramPacket(sendData,
sendData.length, IPAddress, 3005);
        clientSocket.send(sendPacket);
        DatagramPacket receivePacket = new DatagramPacket(receiveData,
receiveData.length);
        clientSocket.receive(receivePacket);
        String modifiedSentence = new String(receivePacket.getData());

        Date date2 = new Date();
        long time2 = date2.getTime();

        System.out.println("Serverul a trimis:" + modifiedSentence + " \n in
" + (time2 - time1) + " milisecunde" + "\n dimensiunea:" +
receivePacket.getLength());
        clientSocket.close();
    }
}

```

SERVER

```

package org.example;

import java.net.DatagramPacket;
import java.net.DatagramSocket;
import java.net.InetAddress;

class udpserver {
    public static void main(String args[]) throws Exception {
        DatagramSocket serverSocket = new DatagramSocket(3005);
        byte[] receiveData = new byte[1024];
        byte[] sendData;
        while (true) {
            DatagramPacket receivePacket = new DatagramPacket(receiveData,
receiveData.length);
            serverSocket.receive(receivePacket);
            String sentence = new String(receivePacket.getData());
            System.out.println("Am primit: " + sentence);
            InetAddress IPAddress = receivePacket.getAddress();
            int port = receivePacket.getPort();
            String capitalizedSentence = sentence.toUpperCase();
            sendData = capitalizedSentence.getBytes();
            DatagramPacket sendPacket = new DatagramPacket(sendData,
sendData.length, IPAddress, port);
            serverSocket.send(sendPacket);
        }
    }
}

```

