

## Echoclient.java

```
import java.net.DatagramPacket;
import java.net.DatagramSocket;
import java.net.InetAddress;
import java.util.Scanner;

public class Echoclient {
    public static void main(String[] args) {
        try {
            DatagramSocket socket = new DatagramSocket(); // Create a DatagramSocket

            Scanner scanner = new Scanner(System.in);
            System.out.print("Enter message to send to server: ");
            String message = scanner.nextLine();

            byte[] sendData = message.getBytes(); // Convert the message to bytes
            InetAddress serverAddress = InetAddress.getByName("localhost"); // Server address
            int serverPort = 9876; // Server port

            // Create a DatagramPacket to send to the server
            DatagramPacket sendPacket = new DatagramPacket(sendData, sendData.length,
serverAddress, serverPort);

            socket.send(sendPacket); // Send the packet to the server

            // Receive the echoed message from the server
            byte[] receiveData = new byte[1024];
            DatagramPacket receivePacket = new DatagramPacket(receiveData,
receiveData.length);
            socket.receive(receivePacket);

            String echoedMessage = new String(receivePacket.getData(), 0,
receivePacket.getLength());
            System.out.println("Received from server: " + echoedMessage);

            // Close the socket
            socket.close();
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

## Echoserver.java

```

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

public class Echoserver {
    public static void main(String[] args) {
        try {
            DatagramSocket socket = new DatagramSocket(9876); // Create a
            DatagramSocket on port 9876

            while (true) {
                byte[] receiveData = new byte[1024]; // Buffer to receive data
                DatagramPacket receivePacket = new DatagramPacket(receiveData,
                receiveData.length);

                socket.receive(receivePacket); // Receive data from the client

                String message = new String(receivePacket.getData(), 0,
                receivePacket.getLength());
                System.out.println("Received from client: " + message);

                // Echo back to the client
                DatagramPacket sendPacket = new
                DatagramPacket(receivePacket.getData(), receivePacket.getLength(),
                receivePacket.getAddress(), receivePacket.getPort());
                socket.send(sendPacket);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

```

## Client O/P

Enter message to send to server: Hello, this is a test message from the client!  
 Received from server: Hello, this is a test message from the client!

## **Server O/P**

Received from client: Hello, this is a test message from the client!