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import java.net.* ;
import java.util.* ;

public class EchoClient {

    static final int ECHOPORT = 8000;
    static final String LOCALSERVER = "localhost";

    public static void main(String[] args) throws Exception {
        if( args.length > 1 ) {
            System.err.printf("usage: java EchoClient [server_computer] \n") ;
            System.exit(0);
        }
        // Get server IP address and create an UDP socket
        String servidor = LOCALSERVER;
        if( args.length == 1) servidor = args[0];
        InetAddress serverAddress = InetAddress.getByName( servidor ) ;
        DatagramSocket socket = new DatagramSocket();

        // Read a message from the input console
        Scanner in = new Scanner( System.in );
        System.out.printf("Echo client - please type a messsage: ") ;
        String request = in.nextLine();

        // Prepare a datagram to send to the server in a compact way,
        // send it, wait for the reply, print it
        DatagramPacket datagram = new DatagramPacket ( request.getBytes(),
            request.length(), serverAddress, ECHOPORT ) ;
        socket.send( datagram );
        socket.receive( datagram );
        socket.close() ;
        System.out.printf("Got: \"%s\"\n",
            new String( datagram.getData(), 0, datagram.getLength() ) ) ;
    } // main
}

```

```

import java.net.*;

public class EchoServer {

    static final int ECHOPORT = 8000;
    static final int MAXBLOCKSIZE = 1460 ;

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

        // create input / output UDP socket and bind it to the ECHOPORT
        DatagramSocket socket = new DatagramSocket( ECHOPORT ) ;

        // prepare a datagram, for receiving and sending
        DatagramPacket datagram = new DatagramPacket(
            new byte[MAXBLOCKSIZE], MAXBLOCKSIZE ) ;

        for(;;) { // server endless loop
            System.out.println( "Echo server ready");
            socket.receive( datagram );
            System.out.printf("Got: %s \n", new String( datagram.getData(), 0,
                datagram.getLength()));
            //prepare an UDP datagram with the reply
            // the port and IP address associated with the datagram are the ones
            // of the sender when a datagram is received and are used as the
            // IP address and port of the destination when the datagram is sent
            socket.send( datagram ) ;
            datagram.setLength(MAXBLOCKSIZE); // since the payload
                                                // may have shrunk
        } // endless loop
    } // main
} // EchoServer

```