

## CLIENT

```
import java.io.*;

import java.net.*;
@SuppressWarnings("deprecation")
class pingclient {
    public static void main(String args[]) throws Exception {
        String str;
        int c = 0;
        long t1, t2;

        Socket s = new Socket("127.0.0.1", 5555);
        DataInputStream dis = new DataInputStream(s.getInputStream());
        PrintStream out = new PrintStream(s.getOutputStream());

        while (c < 4) {
            t1 = System.currentTimeMillis();
            str = "Welcome to network programming world";
            out.println(str);
            System.out.println(dis.readLine());
            t2 = System.currentTimeMillis();
            System.out.println("TTL=" + (t2 - t1) + "ms");
            c++;
        }

        s.close();
    }
}
```

## SERVER

```
import java.io.*;
import java.net.*;
@SuppressWarnings("deprecation")
class pingserver {
    public static void main(String args[]) throws Exception {
        ServerSocket ss = new ServerSocket(5555);
        Socket s = ss.accept();
        int c = 0;

        while (c < 4) {
            DataInputStream dis = new DataInputStream(s.getInputStream());
            PrintStream out = new PrintStream(s.getOutputStream());
            String str = dis.readLine();
            out.println("Reply from " + InetAddress.getLocalHost() + "; Length: " +
```

```
str.length());  
    c++;  
}  
  
s.close();  
ss.close();  
}  
}
```

## OUTPUT

```
D:\>javac pingserver.java  
  
D:\>java pingserver  
  
D:\>|
```

```
D:\>java pingclient  
Reply from ChuckleBox/192.168.56.1; Length: 36  
TTL=17ms  
Reply from ChuckleBox/192.168.56.1; Length: 36  
TTL=0ms  
Reply from ChuckleBox/192.168.56.1; Length: 36  
TTL=0ms  
Reply from ChuckleBox/192.168.56.1; Length: 36  
TTL=0ms  
  
D:\>|
```

## INPUT

```
import java.io.*;
@SuppressWarnings("deprecation")
public class TraceServer {
    public static void main(String args[]) {
        try {
            String str;
            System.out.print("Enter the IP Address to be Traced: ");
            BufferedReader buf1 = new BufferedReader(new InputStreamReader(System.in));
            String ip = buf1.readLine();
            Runtime H = Runtime.getRuntime();
            Process p = H.exec("tracert " + ip);
            InputStream in = p.getInputStream();
            BufferedReader buf2 = new BufferedReader(new InputStreamReader(in));

            while ((str = buf2.readLine()) != null) {
                System.out.println(" " + str);
            }
        } catch (Exception e) {
            System.out.println(e.getMessage());
        }
    }
}
```

## OUTPUT

```
D:\>java TraceServer
Enter the IP Address to be Traced: 100.127.34.100

Tracing route to ChuckleBox [100.127.34.100]
over a maximum of 30 hops:

    1    <1 ms    <1 ms    <1 ms  ChuckleBox [100.127.34.100]

Trace complete.
D:\>|
```