

```
1  using System;
2  using System.Collections.Generic;
3  using System.Linq;
4  using System.Text;
5  using System.Threading.Tasks;
6  using System.Net.Sockets;
7
8  namespace connector
9  {
10     class Program
11     {
12         static void Main(string[] args)
13         {
14             while (true)
15             {
16                 Console.WriteLine("press S for server, press C for client");
17                 var begin_with = (Console.ReadKey().KeyChar).ToString().ToUpper();
18                 switch (begin_with)
19                 {
20                     case "S": { RunServer(); } break;
21                     case "C": { RunClient(); } break;
22                 }
23                 Console.WriteLine("Either it ended or that wasnt the key");
24             }
25         }
26
27         private static void RunClient()
28         {
29             try
30             {
31
32                 TcpClient client = new TcpClient();
33                 client.Connect("127.0.0.1", 99);
34                 var stream = client.GetStream();
35                 string msg = "This is my message";
36                 Byte[] msg_data = System.Text.Encoding.ASCII.GetBytes(msg);
37                 stream.Write(msg_data, 0, msg_data.Length);
38                 Console.WriteLine("Server should receive my message.");
39
40                 stream.Close();
41                 client.Close();
42
43             }
44             catch (Exception e)
45             {
46                 Console.WriteLine("Client failed to connect on this PC: " + e.Message);
47             }
48         }
49
50         private static void RunServer()
51         {
52             try
53             {
54                 TcpListener tServer = new TcpListener(99);
55                 tServer.Start();
56
57                 Byte[] bytes = new Byte[256];
58                 string data = null;
59
60                 while (true)
61                 {
62                     Console.WriteLine("\nServer waiting for client...");
63
64                     TcpClient client = tServer.AcceptTcpClient();
65                     Console.WriteLine("Connected!");
66
67                     data = null;
68                     NetworkStream stream = client.GetStream();
69                     int i;
70
71                     while ((i = stream.Read(bytes, 0, bytes.Length)) != 0)
72                     {
73                         data = System.Text.Encoding.ASCII.GetString(bytes, 0, i);
74                         Console.WriteLine("Recived {0}", data);
75                         data = data.ToLower();
76                         byte[] msg = System.Text.Encoding.ASCII.GetBytes(data);
77
78                         stream.Write(msg, 0, msg.Length);
79                         Console.WriteLine("Sent: {0}", data);
80                     }
81                 }
82             }
83         }
84     }
85 }
```

```
80         }
81     }
82     client.Close();
83 }
84 } catch (Exception e) { Console.WriteLine("Server failed on this PC: " + e.Message); }
85 }
86 }
87 }
```