## Assignment 1 AYESHA ANJUM 10738

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## Server:

```
Program.cs ≠ X
server Explorer
   C# Server1

▼ ServerAssg1.Program

         1
                ⊐using System;
                 using System.Collections.Generic;
                 using System.Linq;
         3
Toolbox
         4
                 using System.Text;
          5
                 using System.IO;
                using System. Threading;
         6
                 using System.Threading.Tasks;
         7
         8
                 using System.Net;
         9
                using System.Net.Sockets;
                                                                                  E:\KIET\NP\Task\Server1\Server1\bin\Debug\Server1.exe
        10
                                                                                    -- SERVER SIDE ---
        11
               □namespace ServerAssg1
        12
                     class Program
        13
        14
                                                                                  Waiting for incoming clients....
                         public static void ClientRequest(object obj)
        15
        16
                              TcpClient cl = (TcpClient)obj;
        17
        18
                              try {
                                 StreamReader reader = new StreamReader(cl.
StreamWriter writer = new StreamWriter(cl.GetStream());
        19
        20
        21
                                  String str = String.Empty;
                                 while (!(str = reader.ReadLine()).Equals("Exit") || (str == null)) {
    Console.WriteLine("\n From client -> " + str);
        22
        23
        24
                                      writer.Flush();
        25
                                 reader.Close();
        26
        27
                                  writer.Close();
        28
                                 Console.WriteLine(" Closing Client Connection !");
        29
        30
        31
                             catch (IOException) {
                                 Console.WriteLine("\n\n Problem in connecting, closing process..\n");
        32
        33
        34
                              finally {
                                 if (cl != null) {
        35
        36
                                  cl.Close(); }
        37
        40
                         static void Main(string[] args)
        41
        42
                              TcpListener lis = null;
        43
                              try {
                                 lis = new TcpListener(IPAddress.Parse("192.168.1.111"), 8000);
        44
        45
                                  lis.Start();
        46
                                  Console.WriteLine(" --- SERVER SIDE --- \n\n");
        47
                                  while (true)
        48
                                   Console.WriteLine("\n Waiting for incoming clients....");
        49
                                     TcpClient client = lis.AcceptTcpClient();
        50
                                     Console.WriteLine("\n New Client Connected!");
                                     Thread t = new Thread(ClientRequest);
        51
                                    t.Start(client);
        52
        53
        54
        55
                              catch (Exception e) {
                                 Console.WriteLine(e);
        56
        57
        58
                              finally {
                                 if (lis != null)
        59
        60
                                      lis.Stop();
         61
        62
        63
                              Console.ReadKey();
        64
        65
```

## Client:

```
Program.cs ⊕ ×
erver Explorer
   C# ClientAssg1

▼ ClientAssg1.Program

→ 

□

□

Main(string[] args)

         1
               ⊕using ...
        10
               pamespace ClientAssg1
        11
Toolbox
        12
                     class Program
        13
        14
        15
                         static void Main(string[] args)
        16
        17
                              TcpClient cl = new TcpClient("192.168.1.111", 8000);
        18
              Ė
                                  StreamReader reader = new StreamReader(c1.GetStream());
        19
                                  StreamWriter writer = new StreamWriter(cl.GetStream());
        20
                                  String str = String.Empty;
        21
                                  while (!str.Equals("Exit")) {
        22
                                      Console.WriteLine("Write message you want to send the server:");
        23
        24
                                      str = Console.ReadLine();
        25
                                      writer.WriteLine(str);
        26
                                      writer.Flush();
        27
                                      String serStr = reader.ReadLine();
        28
                                      Console.WriteLine(serStr);
        29
        30
                                  reader.Close();
        31
                                  writer.Close();
                                  cl.Close();
        32
        33
                              catch (Exception e) {
        34
        35
                                  Console.WriteLine(e);
        36
                              finally {
        37
                                  if (cl != null) {
        38
        39
                                     cl.Close(); }
                              }}}
```

## **Outputs:**

