CHƯƠNG 3: BÀI TẬP 1

```csharp
using System;
using System.Net;
using System.Net.Sockets;
using System.Text;
class SimpleUdpSrvr
{
  public static void Main()
  {
   int recv;
   byte[] data = new byte[1024];
   IPEndPoint ipep = new IPEndPoint(IPAddress.Any, 9050);
   Socket newsock = new Socket(AddressFamily.InterNetwork,
           SocketType.Dgram, ProtocolType.Udp);
   newsock.Bind(ipep);
   Console.WriteLine("Waiting for a client...");
   IPEndPoint sender = new IPEndPoint(IPAddress.Any, 0);
   EndPoint Remote = (EndPoint)(sender);
   recv = newsock.ReceiveFrom(data, ref Remote);
   Console.WriteLine("Message received from {0}:", Remote.ToString());
   Console.WriteLine(Encoding.ASCII.GetString(data, 0, recv));
   string welcome = "Welcome to my test server";
   data = Encoding.ASCII.GetBytes(welcome);
   newsock.SendTo(data, data.Length, SocketFlags.None, Remote);
   while(true)
   {
     data = new byte[1024];
     recv = newsock.ReceiveFrom(data, ref Remote);

     Console.WriteLine(Encoding.ASCII.GetString(data, 0, recv));
     newsock.SendTo(data, recv, SocketFlags.None, Remote);
   }
  }
}
```

```csharp
using System;
using System.Net;
using System.Net.Sockets;
using System.Text;
class SimpleUdpClient
{
  public static void Main()
  {
   byte[] data = new byte[1024];
   string input, stringData;
   IPEndPoint ipep = new IPEndPoint(
           IPAddress.Parse("127.0.0.1"), 9050);
   Socket server = new Socket(AddressFamily.InterNetwork,
           SocketType.Dgram, ProtocolType.Udp);
```

```csharp
      string welcome = "Hello, are you there?";
      data = Encoding.ASCII.GetBytes(welcome);
      server.SendTo(data, data.Length, SocketFlags.None, ipep);
      IPEndPoint sender = new IPEndPoint(IPAddress.Any, 0);
      EndPoint Remote = (EndPoint)sender;
      data = new byte[1024];
      int recv = server.ReceiveFrom(data, ref Remote);
      Console.WriteLine("Message received from {0}:", Remote.ToString());
      Console.WriteLine(Encoding.ASCII.GetString(data, 0, recv));
      while(true)
      {
        input = Console.ReadLine();
        if (input == "exit")
         break;
        server.SendTo(Encoding.ASCII.GetBytes(input), Remote);
        data = new byte[1024];
        recv = server.ReceiveFrom(data, ref Remote);
        stringData = Encoding.ASCII.GetString(data, 0, recv);
        Console.WriteLine(stringData);
      }
      Console.WriteLine("Stopping client");
      server.Close();
    }
}
```