**Xây dựng ứng dụng client server theo giao thức TCP**

Chương trình server

namespace SimpleTcpSrv

{

class Program

{

static void Main(string[] args)

{

int recv;

byte[] data = new byte[1024];  // bo dem du lieu

IPEndPoint ipep = new IPEndPoint(IPAddress.Any, 9050); // khai bao dia chi

Socket newsock = new Socket(AddressFamily.InterNetwork, SocketType.Stream, ProtocolType.Tcp); // khai bao socket

newsock.Bind(ipep); // gan socket voi dia chi

newsock.Listen(10);

Console.WriteLine(“Waiting for a client…”);

Socket client = newsock.Accept();

IPEndPoint clientep = (IPEndPoint)client.RemoteEndPoint;

Console.WriteLine(“Connected with {0} at port {1}”, clientep.Address, clientep.Port); // lay thong tin client

string welcome = “Welcome to my test server”;

data = Encoding.ASCII.GetBytes(welcome); // convert thanh byte

client.Send(data, data.Length, SocketFlags.None); gui den client

while (true)

{

data = new byte[1024];

recv = client.Receive(data);

if (recv == 0)

break;

data = new byte[2048];

data = Encoding.ASCII.GetBytes(result);

Console.WriteLine(Encoding.ASCII.GetString(data,0,recv));

client.Send(data, data.Length, SocketFlags.None); // gui lai client

}

Console.WriteLine(“Disconnected from {0}”,

clientep.Address);

client.Close();

newsock.Close();

}

}

}

Chuong trinh client

namespace SimpleTcpClient

{

class Program

{

static void Main(string[] args)

{

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.Stream, ProtocolType.Tcp);

try

{

server.Connect(ipep);

} catch (SocketException e)

{

Console.WriteLine(“Unable to connect to server.”);

Console.WriteLine(e.ToString());

return;

}

int recv = server.Receive(data);

stringData = Encoding.ASCII.GetString(data, 0, recv);

Console.WriteLine(stringData);

while (true)

{

input = Console.ReadLine();

if (input == “exit”)

break;

server.Send(Encoding.ASCII.GetBytes(input));

data = new byte[1024];

recv = server.Receive(data);

stringData = Encoding.ASCII.GetString(data, 0, recv);

Console.WriteLine(stringData);

}

Console.WriteLine(“Disconnecting from server…”);

server.Shutdown(SocketShutdown.Both);

server.Close();

}

}

}