

Network Programming

Task:1

2-Summerize the methods of DatagramSocket and DatagramPacket class

The Solution

DatagramSocket: A datagram socket is the sending or receiving point for a packet delivery service. Each packet sent or received on a datagram socket is individually addressed and routed. Multiple packets sent from one machine to another may be routed differently, and may arrive in any order.

DatagramPacket: **DatagramPacket** is a message that can be sent or received. It is a data container. If you send multiple packets, it may arrive in any order. Additionally, packet delivery is not guaranteed.

3-What is Socket class:

The Solution

The Socket class represents client sockets, and is a communication channel between two TCP communications ports belonging to one or two machines. A socket may connect to a port on the local system, avoiding the need for a second machine, but most network software will usually involve two machines. TCP sockets can't communicate with more than two machines, however. If this functionality is required, a client application should establish multiple socket connections, one for each machine.

4-What is InetAddress class is used for?

The Solution

This class represents an Internet address as two fields: `hostName` (a `String`) and `address` (an `int`). `hostName` contains the name of the host; for example, *www.oreilly.com*. `address` contains the 32-bit IP address. These fields are not public, so you can't access them directly. It will probably be necessary to change this representation to a byte array when 16-byte IPv6 addresses come into use. However, if you always use the `InetAddress` class to represent addresses, the changeover should not affect you; the class shields you from the details of how addresses are implemented.