

2. Summarize the methods of Datagramsocket and Datagrampacket classes.

DatagramSocket : is a type of network socket which provides connection-less point for sending and receiving packets. Every packet sent from a datagram socket is individually routed and delivered. It can also be used for sending and receiving broadcast messages. Datagram Sockets is the java's mechanism for providing network communication via UDP instead of TCP.

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

3. What is *Socket* class?

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 java.net.InetAddress class provides methods to get the IP address of any hostname. An IP address is represented by 32-bit or 128-bit unsigned number. InetAddress can handle both IPv4 and IPv6 addresses.