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Chapter 33 Check Point Questions

Section 33.2

▼**33.2.1**

How do you create a server socket? What port numbers can be used? What happens if a requested port number is already in use? Can a port connect to multiple clients?

You use new ServerSocket(port) to create a server socket. You can use any number after 1024. If a port is already in use, you will get an exception; then you can choose another number. You can have a server running on a port serving multiple clients.

Hide Answer

▼**33.2.2**

What are the differences between a server socket and a client socket?

A server socket can handle connection requests from a client. After the connection is established, the communications between the server and the client are through the client sockets.

Hide Answer

▼**33.2.3**

How does a client program initiate a connection?

The client program uses new Socket(hostname, port) to request a connection to the server.

Hide Answer

▼**33.2.4**

How does a server accept a connection?

The server listens for connecting requests from clients by invoking serverSocket.accept(), which blocks the program from executing the next statement until a connection is established.

Hide Answer

▼**33.2.5**

How are data transferred between a client and a server?

You need to use getInputStream() to create a stream to receive data from the socket and use getOutputStream() to create a stream to send data from the socket.

Hide Answer

Section 33.3

▼**33.3.1**

How do you obtain an instance of InetAddress?

To obtain an instance of InetAddress, use socket.getInetAddress().

Hide Answer

▼**33.3.2**
What methods can you use to get the IP address and hostname from an InetAddress?

Use the getHostName() and getHostAddress() to obtain the host name and IP address from an InetAddress instance.

Hide Answer

Section 33.4

▼**33.4.1**
How do you make a server serve multiple clients?

Use the Thread class and create multiple threads to handle multiple connections, one thread per client.

Hide Answer

Section 33.5

▼**33.5.1**
How does a server receive connection from a client? How does a client connect to a server?

No. An applet can only connect to the server from the machine where the applet is loaded.

Hide Answer

▼**33.5.2**
How do you find the host name of a client program from the server?

To find the host name of a machine where the applet is loaded, use getCodeBase().getHost(). getCodeBase() returns the URL of the applet class. getHost() returns the host name.

Hide Answer

▼**33.5.3**
How do you send and receive an object?

To send or receive objects, create an ObjectInputStream from getInputStream() and create an ObjectOutputStream from getOutputStream().

Hide Answer

Section 33.6

▼**33.6.1**
What would happen if the preferred size for a cell is not set in line 227 in Listing 33.10?

Yes.

Hide Answer

▼**33.6.2**
If a player does not have the turn but clicks on an empty cell, what will the client program in Listing 33.10 do?

If a player does not have the turn, but clicks on an empty cell, the code in line 254 will be executed and the code in line 255 will not be executed.

Hide Answer