In-Chapter Exercise Solutions
22.1 KDE4 and the Plasma Desktop management system.
22.2 Gnome.
22.3 Yes, because then there would be no network latency or slowing-down of the display that the server produces and manages, because it could execute multiple requests at one time. See the section on Xcb above for more information on this aspect of the implementation of the X Protocol.
22.4 They have opposite meanings. In X Windows, the application is the client (or executing on the client), and the server is handling requests from the client and sending replies to the client, and events to to a display device. Also, in network programming, the server is not a purely "graphical" device maintaining a stream connection to multiple clients, it is a machine or computing node that is running multiple programs and "serving" them via a network to a client.
22.5 xclock -geometry 75x75+200+200 &
22.6 160x120.
22.7 xterm -bg green &
22.8 xterm -sb & to enable scroll bars if they are disabled, xterm +sb to disable them.
22.9 No answer required.
22.10 No answer required.
22.11 No answer required, but **pkg** available on our PC-BSD UNIX system, is a viable alternative. Be advised that you should be root or have administrative privileges on your computer to run **pkg** effectively.
22.12   No answer required, but **pkg** available on our PC-BSD UNIX system, is a viable alternative. Be advised that you should be root or have administrative privileges on your computer to run **pkg** effectively.
22.13   No answer required.
22.14   No answer required.
22.15   Hold down the right-most mouse button, and click on Folder Settings. The View option allows you to change the Wallpaper to whatever is available as an image.
Plasma is the default window management/desktop management system in KDE4.
22.16 No answer required.
22.17 No answer required.
22.18 To make your life easier, find a file in your home directory that you own, then right-click on it, and show its properties. In the Properties window that appears, click on the tab named Permissions, then on the Advanced Permissions button. You can check off execute for either user, group, or others in this Advanced Permissions window. Easier than memorizing octal numbers for permission-setting with chmod.
22.19 Start the Event-Request loop
22.20   XCreateSimpleWindow(*display, parent, x, y, height,border_width, border, background);

*display	Specifies the connection to the X server.
parent	Specifies the parent window. and are relative to the inside of the parent window's borders
x, y	Specify the x and y
width, height	Specify the width and height. The dimensions must be nonzero, or a BadValue error results.
border_width	Specifies the width of the created window's border in pixels.
border	Specifies the border pixel value of the

	window.
background	Specifies the background pixel value of the window.

22.21 The event-request loop is missing, particularly the way to terminate the loop. We had you launch it into the background so- To close the window without using the KDE4 window manager kill button, you need to use the **ps** command to find out the process id number of the executing program, and use the **kill** command with that process id number.