

Socket Programing

Assignment

1. Install and compile the Python programs (shown in the slides/reference) TCPClient and UDPClient on one host and TCPServer and UDPServer on another host.
 - a. Suppose you run TCPClient before you run TCPServer. What happens? Why?
 - b. Suppose you run UDPClient before you run UDPServer. What happens? Why?
 - c. What happens if you use different port numbers for the client and server sides?
2. Write a simple TCP program for a server that accepts lines of input from a client and prints the lines onto the server's standard output. (You can do this by modifying the TCPServer.py program in the slides/reference.) Compile and execute your program. On any other machine that contains a Web browser, set the proxy server in the browser to the host that is running your server program; also configure the port number appropriately. Your browser should now send its GET request messages to your server, and your server should display the messages on its standard output. Use this platform to determine whether your browser generates conditional GET messages for objects that are locally cached.