

CSCI-330 Operating Systems
Quiz 12

Real Name _____

During this exam you will be asked to transmit an 8-character name to the server which will be displayed on the screen along with your progress. If you wish to keep your progress anonymous, please do not transmit an identifiable name to the server.

Please write in the space provided below the 8-character name that you will be transmitting to the server. You may include spaces and punctuation.

Transmitted Name _____

The next page describes the protocol used by the client and server. Your task is to write a client that satisfies the protocol.

The protocol is divided into 3 trials. When you successfully implement the protocol for a trial the server will print to the screen a message indicating that you've passed the trial.

Trial 1: The client sends the server an 8-byte name. All 8 bytes must contain printable characters. Do not send the null character.

Trial 2: The client receives a 4-byte integer from the server, increments the value (adds 1 to the value), and sends the server the new value (4 bytes).

Trial 3: The client receives an array of five integers. The client returns the integer with the smallest value.

Note: In the example below the client data is just a sample. You should expect different values.

SERVER	CLIENT	# bytes transmitted
	attempting connection	
accepted connection, socket [4]	connection made...	
attempting to receive name...	sent name [rmcgrego]	8
[rmcgrego] name received		
[rmcgrego] TRIAL 1 - PASSED		
[rmcgrego] sending integer...	received integer [1700]	4
	sent integer + 1 [1701]	4
[rmcgrego] attempting to receive integer...		
[rmcgrego] correct value received		
[rmcgrego] TRIAL 2 - PASSED		
[rmcgrego] sending array of integers	received array [3,2,1,4,5]	20
	sent smallest value [1]	4
[rmcgrego] correct value received		
[rmcgrego] TRIAL 3 - PASSED		