

Design a client-server system, with both the client and server components.

The **server** sends a formatted string when requested to do so. The string contains a sequence of integers, strings, and floating point numbers as strings of characters. Each string is terminated by a NULL character (`\0`). The first string contains the format details for the remainder of the string, using conventions from C `printf` statement. Thus the string

The answer is 42.

will be sent as

`%s%d%s\0The answer is \0 42\0.\0`

The data is sent as a stream of characters, and hence, 42 will be sent as character 4 followed by character 2. The server will specify the port to connect to. You should use a port number (3000+your uid on hoare).

The **client** will connect to the specified port and read the string. It will then convert the string to whatever specified by the format string (first received string) and then, print it on `stdout`. It should receive all the elements, with the number of elements deduced from the format string.

Do the assignment on hoare by creating a directory which is your last name. The exceptions will be zhu1 (Wei Zhu) and zhu2 (Weiwei Zhu). After you are done submit the assignment by using the handin script on hoare as

`~sanjiv/bin/handin directory cs373 4`