

Python Homework Day 09 - Sockets

(v1.3)

Guess Server:

- 1) Create a Guess-the-Number server. Using UDP. The server will pick a random number from 1 to 1000. clients will be able to send a number to the server (as a UTF-8 string) and will get a response: "too big" / "too small" / "correct". if correct, the server will choose another random number.
- 2) make a version of the server that sends the number to guess as binary (your choice of byte size and endianness)

Rock Paper Scissors:

- 3) Create a program that can act as both a server and a client (ask the user if they wish to host a game or connect to a game). as a server the program will wait for a connection and will then play a game with the client. as a client the program will connect to a server and then play a game with the server. on both the user will be asked to input rock/paper/scissors (r/p/s) after both have made a choice the result will be printed to both, the winner side will print ("you win") the loser side will print ("you lose"), on a tie print:"tie". repeat 3 times and print the winner/loser/tie of best of 3 and disconnect both.

Login Server:

- 4) Create a server program with a dictionary of emails as keys and passwords as values, fill it with some values. create a client program that will allow registering or logging in.
 - a) For registration, the user will be asked to enter an email, which will be sent to the server. if it is already taken, tell print a message to the client and return to the "register/login" menu. if the email is valid the user will enter a password twice and the password will be sent to the server.
 - b) For Logging in, the user will enter email and password, on success print "successfully logged in", on failure print "bad credentials"