Exercise 14 – 1A2B (Part 3)

For Part 1, you made a program where the computer decides on a secret number, the user makes guesses, and the computer tells the user how accurate the guesses are.

For Part 2, you made a program where the user decides on a secret number, computer guesses the user’s secret number, and the user tells the computer how accurate the guesses are.

Now, for Part 3, make a program that combines Part 1 and Part 2. Basically have them play the game with each other by the means of network programming. Part 1 is the “host” and Part 2 is the “guest”. The host is basically like someone who has set up the 1A2B game in their house, opened the door, and is waiting for guests to come in to play with them but they don’t necessarily go out and invite any guests. The guests are the ones that see a sign that says ‘come in to play 1A2B’ and walks into the house. Here’s the flow:

1) Part 1 decides on a secret number.

2) Part 1 “opens the door” to let anyone who wants to come in to come in.

3) Part 2 “walks in”.

4) Part 1 asks Part 2 for a guess and Part 2 gives Part 1 a guess.

5) Part 1 tells Part 2 the accuracy of the guess.

6) Steps 4 & 5 are repeated until Part 2 guesses correctly.

7) After Part 2 guesses correctly, Part 1 tells Part 2 they won and how many guesses it took them and then the program ends.

Please have the program display the guesses, the accuracies, a message when the guest wins, the number of guesses, and anything additional that would make it easy for a person to follow how the game played out.