

# Homework 4

*Due: 26 Feb 2015*

For all of these, the result need not be especially pretty but should be clean HTML.

## Problem 4.1

Make a page that includes a table that shows, for every integer between 1 and 20, its square and its square root to four decimal places. (This should be done programmatically, i.e. don't just type it all in to the html!)

## Problem 4.2

Make a page that plays a game: the first time it is opened (with no arguments or inputs), it picks a number between 1 and 100 and gives the user an opportunity to guess (by typing in a number and clicking a 'submit' button). In each subsequent round, the page displays the previous guess and, if incorrect, whether it was too high or too low, and all the numbers previously guessed. (You will find the 'hidden' input type to be useful here.)

## Problem 4.3

Turning around the previous problem: this time, the computer tells the user to pick a number and displays an initial guess; when the user clicks a button to say whether it's too high, too low, or just right, the computer uses this information to binary-search for the number the user was thinking of.

## Handing in

The .php files should be in your `public.html` directory so I can test them, but do also hand them in with the handin script, as `hwk4`, for my convenience in grading them. Also include a readme that tells me the URL of each file (again, to make it easier for me to test).

Breaking from my rule so far this term, this homework is not group work (but is still collaborative, i.e. you can talk to other people about it).