

PLC: Workout 3 [80 points]

Due date: Friday, February 11th by midnight

About This Homework

You will solve programming problems about datatypes, pattern matching, and recursion, in Haskell.

How to Turn In Your Solution

Follow this link to create your repo on Github Classrooms for workout3:

<https://classroom.github.com/a/XDvFEJVZ>

If you work with a partner, please add to your repo a file called `partners.txt`, and list your name and your partner's name there. Both of you should submit your solution: each partner pushes it to their github repo.

How To Get Help

You can post questions in the Discussions section of ICON.

You are also welcome to come to our office hours. See the course's Google Calendar, linked from the github page for the class, for times and Zoom links for office hours. You can also find these on the "Zoom links, office hours" page under "Pages" on ICON:

<https://uiowa.instructure.com/courses/179776/pages/office-hours>

1 Reading

Read Chapters 4, 5, and 6 of the required book, *Programming in Haskell*, by Graham Hutton. The main focus is Chapter 6 for this homework.

2 Haskell exercises [80 points]

Complete the 10 exercises in `Exercises.hs`. Each is worth 8 points. There are tests in `PublicTests.hs` you can use to help make sure your code is correct. When you push to github, tests will run to check that `Exercises` compiles and that your public tests pass. As for previous workouts, code that does not type-check will not receive partial credit, so make sure that your code at least type-checks with Haskell (in other words, Haskell does not print type errors when you load the file).