

Lab 5

Do not submit either .scm files (for code) or text files (for written answers to questions) for each of the following.

Programs

1. If you wrote any code so far this semester using `let`, `eval`, or `apply`, be sure you can write the same functions without those crutches¹. Using them on the exam will result in a very poor grade.
2. When does `let` make sense? Write two functions that use `let` in a reasonable way, and then rewrite them using the `lambda` translation of `let`. Test for yourself that the code produces the same results.
3. Find a hex partner. Print off only one page of hex paper for every two people, and then play hex:

[http://en.wikipedia.org/wiki/Hex_\(board_game\)](http://en.wikipedia.org/wiki/Hex_(board_game))

You should be able to fit at least nine 11x11 boards on one page - do not waste paper. Play only one or two games, then switch partners. Write down good strategies for use later. Do not code hex yet. I will give you specifications for coding, and if you code now you will have to do a lot of it over.

¹I asked you not to use them, and they have not been needed so far. They do have good uses, we just haven't seen them yet. To be clearer, `let` is often a crutch, but `eval` and `apply` are over-sized hammers.