Lab 4 Honors

Submit either .scm files (for code) or text files (for written answers to questions) for each of the following. **All** code files for this lab must contain proper tests that run when the file is loaded.

Programs

1. AS&S 2.2 (hint: read pages 79-89 to understand what this question is asking. This is *crucial* stuff for this course.)

2. AS&S 2.20 (At last! So many cool things can be done with this.)

3. AS&S 1.26

4. Write flatten, which takes a nested list as argument and produces a non-nested list with elements in the same order. Report and justify big O for time and stack space.

5. Write deep-reverse, s.t. (deep-reverse '(1 (2 3 (4 5)) 6)) → (6 ((5 4) 3 2) 1). Report and justify big O for time and stack space.

6. Write **sort** as an accumulation. Report and justify big O for time and stack space.

7. AS&S 2.29

8. AS&S 2.37

9. AS&S 2.38

10. AS&S 2.63

Submit your code file and a script (or interactions) showing files being loaded (and tested) via Sakai (due Sunday midnight) and on paper (to your TA at the START of **Monday** lab) to receive full credit.

When you use Sakai, remember that you can "upload" files multiple times, but you only click "submit" once.