CS16 Section 9 Mini-Assignment

Due in your section the week of:

4/16 - 4/18

Please remember to bring a hard copy of your answers to section!

Write brief (no longer than 5 sentence responses to each of the following.

Problem 1: Spanning Trees and Forests

Explain the difference between an MST (Minimum spanning tree) and a ST (spanning tree). Between MSF (Minimum spanning forest) and a SF (spanning forest). (How) are they related?

Problem 2: Topsort

Explain the topsort algorithm at a high level. How is it used? What does it do? What are its limitations? Then, come up with your own example (not courses) where a topsort algorithm could be applied, and give examples of at least 5 nodes (i.e. classes) and a proper sorting.

Problem 3: Functional Programming

What are some benefits to functional programming? What are some cons?