Quiz 1 Review (v.1.1)

Quiz 1: Wed Sep 21

- The quiz will begin the class and be 30 minutes long. After the quiz, we'll take a short break and have a short lecture. It will cover material ≤ Simple Programs (?)
  Update in class: < Simple programs (I.e., ≤ State Updates).
- The quiz will be closed book, closed notes, and no support equipment (calculators, phones, computers; nothing more complicated than a retractable pen? :-)
- You'll be given a reference sheet with basic logical equivalences: Commutativity, etc.
- Questions will probably be short answer (2 or 3 sentences) or fill-in-the blank.

Sources for Questions

- The sources for questions will be:
- Class 01 Activity: Why Test? Why Verify? (Robs will not be included.)
- HW 01: Propositional Logic
- Class 02 Activity: Predicate Calculus
- HW 02 (Activity) Expressions and States
- Class 03 Activities: Expr Values, State Updates, Simple Programs

Outcomes So Far

- Here's a list of the outcomes from the various notes, activities, and homework so far this semester. Use them to guide your studying. (What questions were asked for each outcome? Can you think of a similar question? Can you think of a different question that tests your knowledge of the outcome?)

1. Know the pros and cons of testing and of formal systems.
2. Be able to complete or create short proofs of simple propositional logic statements.
3. Identify legal predicates when you see one
4. Translate English descriptions of some simple predicates involving integers and arrays into (first-order) predicate logic.
5. Write down and recognize definitions of memory states
6. Understand what the textbook means by "the value of an expression (given some memory state."
7. Understand the different meanings of "is" in English sentences like "s is the expression 2*x" and "if σ(x)=4, s is 8." *[Added from Activity: State Updates]*
8. Be able to translate between English and mathematical notation for the values of expressions. *[Added from Activity: State Updates]*
9. Be able to read, write, and use simple state updates. *[Added from Activity: State Updates]*
10. ~~*Know the basic syntax and intuitive semantics of our simple deterministic programming language.*~~ *[This is being moved to Quiz 2.]*