This quiz will cover material from lectures 1-8, recitations 1-4, and problem sets 0-3:

- Imperative and definitional knowledge
- Stored program computers
- Syntax, static semantics, semantics
- Straight line, branching, and looping programs

Python-related
- Values
- Types
  - Int, float, Boolean, str, tuple, dict, list
- Expressions
- Statements
  - Print, assignment, conditionals, loops, assert
- Functions
  - Object model and mutation
  - Scope
- Recursive definitions, problem solving, and functions
- Structuring programs using decomposition and abstraction
  - Specifications
  - Parameters

Algorithmic techniques
- Guess and check
- Linear search
- Bisection search
- Successive approximation
  - Newton-Raphson (Newton’s method)

Binary representation of numbers
- Debugging
- Orders of growth