* Problem 16from hw
  + C1 00 01
  + OP code = 1100 0001
  + Operand = 0000 0000 0000 0001 (memory location 1)
  + Register A = A2 11
* Problem 17
  + C1 00 02
    - Same as problem 16, but goes to memory location 2
* **Chapter 7**
* Problem solving
  + The act of finding a solution to a perplexing, distressing, vexing or unsettled question
  + Understand the problem, devise a plan, carry out the plan, ….
  + Ask questions, never reinvent the wheel
    - Similar problems come up again and again in different situations
  + Divide and conquer!
    - Break a large problem into smaller units and solve each
* Computer problem-solving
  + Analysis and specification phase
    - Analyze
    - specification
  + Algorithm development phase
    - Develop algorithm
    - Test algorithm
  + Implementation phase
    - Code algorithm
    - Test algorithm
  + Maintenance phase
    - Use
    - Maintain
* Algorithm
  + A set of unambiguous instructions for solving a problem or sub problem in a finite amount of time using a finite amount of data
* Abstract step
  + Algorithmic step containing unspecified details
* Concrete step
  + Algorithm step in which all details are specified
* Developing an algorithm
  + Two methodologies use to develop computer solutions to a problem
    - Top-down design
      * Focuses on the tasks to be done
    - Object oriented design
      * Focuses on the data involved in the solution
* Methodology
  + Analyze the problem
  + List the main tasks
  + Write the remaining modules
  + Re-sequence and revise as necessary
* Control structure
  + Instruction that determines the order in which other instructions in a program are executed
  + Example: If, switch, loops