Assignment #2
Follow 3 of the 4 steps for solving a problem
Due: Monday, 10/14/13, 11:59pm

1. (40 pts) Complete the 3 of the 4 problem-solving steps to solve the following problem. Find the largest number out of 5 random cards pulled from a deck of cards.

Follow the form outlined as follows:

- **Step 1: Problem Analysis.**
  a. Comments about the problem to aid in understanding it.
  b. Description of the knowledge base (this list would include what you would be expected to know to follow the solution).

- **Step 2: Program Design.** List the specific steps that would enable another person to find the largest among the 5 numbers presented. Remember, you have to be very explicit here to make sure one can actually accomplish the task using your directions.
  1. 
  2. 
  3. 
  ....

- **Step 4: Program Testing.**
  Create a Test Plan with several test cases including the average and extreme cases.

2. (10 pts) How does your solution change if the size of the list is \( n \) instead of 5?

3. (40 pts) Let’s use a game to teach us the three steps. Go to http://robozzle.com. You have to play the tutorial to learn the game, i.e. understand the problem.
   - After the tutorial, go to the EasytoHard tab to see a list of games to play.
   - Play these games: **Around We Go 1**, **Happy Indiana Face**, **spiralman**, and **Dancing Robots**
     - Write down the steps needed to solve each of these puzzles.
     - Run the games to make sure your solution works.
     - Are there many solutions to any of the puzzles?

4. (10 pts) Our next speaker is Dr. Don Morton from the Arctic Region Supercomputing Center talking about Climate Modeling and Cloud computing. Staying in line with being proactive, add two questions for our next speaker to the end of your paper.

5. Electronically submit your document as a pdf by the assignment due date, using TEACH: https://secure.engr.oregonstate.edu:8000/teach.php?type=want_auth