

CMSI 182
INTRODUCTION TO COMPUTER SCIENCE
Fall 2008

Assignment 0909

While the main, credit portion of this assignment is due on September 9, accomplishing the intermediate tasks by the given dates will allow you to get the most out of these first few weeks (and keep you from cramming near the deadline!).

Not for Submission

By August 28

1. Read the “History of computer science” article in Wikipedia, as well as one or more related articles that are linked to it. Look at the articles’ history to see if you can spot likely instances of vandalism.

By September 2

2. Read Chapter 0 of the textbook.
3. Look up and learn about the “Towers of Hanoi” game/puzzle.
4. Think about a mouse placed within a grid-based maze, in search of a piece of cheese. What instructions would you give that mouse so that it can find the cheese every time, regardless of the maze? Can you also accommodate the possibility that the cheese might not be reachable at all?

By September 4

5. Have a draft of the “for submission” exercise portion of this assignment ready — having one will save you some time for a planned class activity on that day.

By September 9

6. Look up and learn how to do the following:
 - Determining the ranking with an Olympic gymnastics competition
 - Determining an Olympic platform diver’s final score based on individual judges and degree of difficulty
 - Determining the winner of a presidential election using an electoral college (i.e., the way the United States of America does it)

For Submission

Submit the following items on hardcopy by the beginning of class on September 9. As much as possible, bring a draft of the exercise portion to class on September 4.

Exercise

As precisely as possible, in a manner that will allow you to do things “blindly,” write up one set of instructions each for:

1. Solving the Towers of Hanoi puzzle
2. Moving a mouse through a grid-based maze until it either finds a piece of cheese or determines that the cheese is unreachable or not present in the maze

Reflection

Once you have finished the exercise, answer the following reflection questions:

1. How do the “Towers of Hanoi” and “mouse in a maze” puzzles relate to what the textbook discusses in Chapter 0?
2. Has your perception of what computer science is changed from the beginning of the course? If so, how has it changed?
3. Is there anything that does not make sense to you so far? If so, what can be done to clear things up for you?