

**Assignment 4**

(By meeting at 4:00pm on 10/17/Sunday)

Your name:	Score:
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*No submission is required, but be ready to answer all questions related with the following questions related with textbook (if a question is to ask you to write a code---you do not have to but you should have thought about it on how to design and implement (what data structures for the problem...))—you will be asked to answer not only the following questions but also those related with the chapter topics—so you must read the textbook!!!*

## Chapter 4:

- Read ALL sections of the chapter.
- Be ready to answer the following questions at the end of Chapter 4:
  - 4.1
  - 4.2
  - 4.3
  - 4.5
  - 4.6
  - 4.8
  - 4.9
  - 4.14
- You will be asked to work on the following questions (you need to **submit** part of this homework at the beginning of the class: **a, c, and d (ii)**)
  - a. Reproduce search tree as shown in Figure 4.3**
  - b. Reproduce (*without looking* at the tables!) tables 4.2, 4.3 from Figure 4.4
    - i. First you need to understand BFS/DFS algorithms and their pseudo codes
  - c. Draw Depth-First-Iterative-Deepening search tree(s) from Figure 4.4**
  - d. Based Figure 4.6 and Figure 4.8:**
    - i. Reproduce (without looking at the tables) tables 4.4, 4.5, and 4.6
    - ii. **Draw a search tree with using of A\* algorithm.**

*(Remember, you need to submit your solutions to the above questions printed in **bold fonts** at the beginning of the class on 10/17/2010)!!*