

CSE 473: Artificial Intelligence
Assignment #2 October 6, 2008
Due: Monday, October 13, beginning of class

Reading Assignment: Read Chapters 6 and 7 carefully.

Problems:

1. Suppose that we run a greedy search algorithm with the following two heuristics:

a) $h(n) = -g(n)$

b) $h(n) = g(n)$

What sort of search will the greedy search emulate?

2. Show the individual steps performed by A* search to solve the following 8-puzzle. Use the two heuristic functions h1 (misplaced tiles) and h2 (Manhattan distance).

Start state:

1	6	2
8		3
7	5	4

Goal state:

1	2	3
8		4
7	6	5

3. Chapter 4, exercise 4.7.
4. Chapter 5, exercise 5.4.
5. Chapter 5, exercise 5.6.
6. Extra credit: Chapter 5, exercise 5.10.