Assignment 7

(**Due dates: (1) for 100% + 15%bonus: 12/10/2008/Wednesday, in class**
(2) for 100%: 12/17/2008/Wednesday
(3) for 0%: after 12/17/2008/Wednesday)

Your name:	Date:

Provide brief answers to the following questions (you may check the textbook Section Questions & Exercises for solutions to some of the questions in the **textbook chapters**, read the textbook and lecture slides for other questions):

1. What is Turing Test (check Wiki link)? Using an example to clarify your understanding of Turing Test. Briefly describe that example.

2. What is John Searle's Chinese Room? Explain how John Searle designed this thought experiment and what point of view he proved with this experiment.

3. Briefly describe the components of a Production System.

4. Draw the search tree in an attempt to solve the eight-puzzle from the following start state, assuming the heuristic used is the same as that developed in the textbook:

1	**2**	**3**
5	**7**	**6**
4		**8**

The following is Figure 9.5 from the textbook.

EMPLOYEE relation

Empl Id	Name	Address	SSN
25X15	Joe E. Baker	33 Nowhere St.	111223333
34Y70	Cheryl H. Clark	563 Downtown Ave.	999009999
23Y34	G. Jerry Smith	1555 Circle Dr.	111005555

JOB relation

Job Id	JobTitle	Skill Code	Dept
S25X	Secretary	T5	Personnel
S26Z	Secretary	T6	Accounting
F5	Floor manager	FM3	Sales
•	•	•	•
•	•	•	•
•	•	•	•

ASSIGNMENT relation

Empl Id	Job Id	Start Date	Term Date
23Y34	S25X	3-1-1999	4-30-2006
34Y70	F5	10-1-2007	*
23Y34	S26Z	5-1-2006	*
•	•	•	•
•	•	•	•
•	•	•	•

5. Write an SQL instruction to retrieve the JobId, StartDate, and TermDate for each job in the accounting department from the relational database described in Figure 9.5 (available from the lecture slides).

6. Write an SQL instruction to retrieve the Name and JobTitle of each current employee from the relational database described in Figure 9.5 (available from the lecture slides).

7. Modify the HTML document below so that the word “Rover” is linked to the document whose URL is http://animals.org/pets/dogs.html.

```
<html>
<head>
<title>Example</title>
</head>
<body>
<h1>My Pet Dog></h1>
<p>My dog’s name is Rover.</p>
</body>
</html>
```

8. Draw a sketch showing how the following HTML document would appear when displayed on a computer screen.

```
<html>
<head>
<title>Example</title>
</head>
<body>
<h1>My Pet Dog></h1>
<img src = “Rover.jpg”>
</body>
</html>
```

9. (**For bonus**) A golf coach needed to select his team of five players from eight who were finalists for his team. The players are Art, Bob, Chuck, Dan, Ed, Fred, George, and Hal. Due to ability under various conditions, temperament, and team morale the following conditions must be met in the team selection.

- *If Dan is on the team, then Fred must also be on the team.*

- *Hal and Ed cannot both be on the team.*

- *George and Chuck cannot be on the team unless both are on the team.*

- *Art cannot be on the team if Dan is on the team.*

a. Transcribe the above selection-condition statement by using **propositional logic** representation (using the space under each sentence).

Which of the following team selections conforms to the requirements of team membership?

a. Art, Bob, Chuck, Ed, and George
b. Art, Bob, Chuck, Dan, and Fred
c. Dan, Ed, Fred, George, and Hal
d. Art, Bob, Chuck, Dan, and Ed
e. Dan, Ed, Fred, George, and Hal

b. If Dan is on the team, which of the following must occur?
    a. Fred and Art must be on the team.
    b. Fred will not be on the team.
    c. Art will be on the team.
    d. Fred must be on the team and Art must not be on the team.
    e. Hal and Ed will also be on the team.

c. Which of the following is the *largest* number of players (or player) the coach can select whose selection would not require either the inclusion or exclusion of at least one other player?
    a. Bob
    b. Fred
    c. Fred and Art
    d. Bob and Hal
    e. Fred and Bob

d. If the coach selects Dan, Hal, George, and Chuck, which of the following lists all the players who could not be chosen for the fifth player?
    a. Fred and Art
    b. Art, Bob, and Ed
    c. Fred, Bob, and Ed
    d. Art and Bob
    e. Fred, Art, and Ed

==========**Important Notes**==========

- Homework can be hand-written or typewritten.
- Put all your solutions in the same order as the above questions.
- Use this question paper as **cover page and staple them together**.