Homework (10/18/2014)

1. **Finish Knight problem**

**2> Backtracking Algorithm problems**

**A. coding practice: MAZE**

Write a program, which use my idea of data structure on page 13.

**Input:** data.in: 1st line is the room matrix size Nx by My

2nd is the Start room (x, y)

3rd is the End room (x,y)

From 4th to Nx \* Ny, it has x y and four wall status (direction order is Left Right Up Down; W is for wall, S is for door)

**Example on slide page 7, the data.in is**

4 3

1 3

4 1

1 1 W S S W

1 2 W S S S

1 3 S W W S

2 1 S S W W

2 2 S W S W

2 3 W W W S

3 1 S W S W

3 2 W S S S

3 3 W S W S

4 1 W S S W

4 2 S W W S

4 3 S W W W

**Output:** Print out the correct path room location (x, y) in each moving step, including Start and End room

**Example on slide page 7, the output is**

1 3

1 2

1 1

2 1

3 1

3 2

4 2

4 1

**3> Keep working on USACO training problems**