

Algorithms and Data Structures

Algorithm Assignment: Lecture 13

ID: _____

Name: _____

- Put six queens on a 6×6 chess-board such that none of them threatens any of others. You should write at least one possible solution.

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```

- Find the shortest step to solve the following sliding puzzle. You can slide a piece to the space at one step. You should illustrate a Breadth First Search tree to solve the puzzle.

```

+---+---+---+      +---+---+---+
| 4 | 1 | 3 |      | 1 | 2 | 3 |
+---+---+---+  --> +---+---+---+
| 2 | 5 |   |      | 4 | 5 |   |
+---+---+---+      +---+---+---+

```