

CS170 Project 01 - Eight Puzzle Solver

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Select from the following options:

- | | |
|---------------------------|-------|
| 1) Use default puzzle | 1 2 3 |
| 2) Use Oh Boy puzzle. | 4 5 6 |
| 3) Enter your own puzzle. | 7 8 * |

Enter Choice Here: 1

Please choose from the following algorithms:

- | | | |
|----------------------------------|-------|----------|
| 1) Uniform Cost Search | 1 2 3 | 1 2 3 |
| 2) A* - Misplace Tile Heuristc | 4 8 * | -> 4 5 6 |
| 3) A* - Euclidean Dist Heuristic | 7 6 5 | 7 8 * |

Enter Choice Here: 3

$f(n) = 3.0$

$g(n) = 0$

$h(n) = 3.0$

1 * 3

4 2 6

7 5 8

Expanding this node...

$f(n) = 3.0$

$g(n) = 1$

$h(n) = 2.0$

1 2 3

4 * 6

7 5 8

Expanding this node...

$f(n) = 3.0$

$g(n) = 2$

$h(n) = 1.0$

1 2 3

4 5 6

7 * 8

Expanding this node...

$f(n) = 3.0$

$g(n) = 3$

$h(n) = 0.0$

1 2 3

4 5 6

7 8 *

GOAL

To solve this problem the search algorithm expanded a total of 3 nodes

The maximum number of nodes in the queue at any one time: 6