**Sample Depth 14**

\*\*\*8-puzzle Solver Using A\* Algorithms\*\*\*\*

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4 5 8

1 6 7

Depth: 7

5 4 2

3 0 7

1 8 6

Depth: 8

0 4 2

5 7 3

1 6 8

Depth: 8

4 1 2

0 5 3

6 7 8

Depth: 11

5 4 2

7 0 3

1 6 8

Depth: 8

3 5 2

4 8 0

1 6 7

Depth: 7

1 5 2

4 0 3

6 7 8

Depth: 10

0 1 2

3 4 5

6 7 8

Depth: 14

Solution found

0 1 2

3 4 5

6 7 8

Depth: 14

Total execution time: 28867ms

Total search cost (nodes generated): 1178

Try again? Enter 1 for yes, other numbers for no

1

Enter 0 to write inputs,

Enter 1 to take input from a text file:

0

Enter 1 for h1 heuristic, 2 for h2 heuristic:

2

Enter unique numbers from 0 to 9

5 4 2 1 3 8 0 6 7

5 4 2

1 3 8

0 6 7

Depth: 0

5 4 2

1 3 8

6 0 7

Depth: 1

5 4 2

1 3 8

6 7 0

Depth: 2

5 4 2

1 3 0

6 7 8

Depth: 3

5 4 2

0 3 8

1 6 7

Depth: 1

5 4 2

1 3 8

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Depth: 4

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6 7 8

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Depth: 4

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6 7 8

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Depth: 2

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5 4 2

3 8 0

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6 7 8

Depth: 6

1 5 2

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6 7 8

Depth: 9

1 0 2

4 5 3

6 7 8

Depth: 9

5 4 2

3 0 8

1 6 7

Depth: 4

5 4 2

3 6 8

1 0 7

Depth: 3

1 5 2

4 3 0

6 7 8

Depth: 9

5 4 2

3 6 8

1 7 0

Depth: 4

0 4 2

5 3 8

1 6 7

Depth: 4

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6 7 8

Depth: 10

5 4 2

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5 3 8

6 7 0

Depth: 8

3 5 2

1 4 8

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Depth: 6

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6 7 8

Depth: 9

3 5 2

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Depth: 7

5 0 2

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6 7 8

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5 4 2

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3 5 2

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Depth: 9

0 5 2

1 4 8

6 3 7

Depth: 6

0 1 4

3 5 2

6 7 8

Depth: 10

1 4 0

3 5 2

6 7 8

Depth: 10

0 4 2

5 1 8

6 3 7

Depth: 6

1 4 2

3 5 0

6 7 8

Depth: 11

4 1 2

0 5 8

6 3 7

Depth: 7

1 4 2

3 0 5

6 7 8

Depth: 12

0 1 2

4 5 8

6 3 7

Depth: 8

1 0 2

3 4 5

6 7 8

Depth: 13

1 5 2

4 0 8

6 3 7

Depth: 6

0 1 2

3 4 5

6 7 8

Depth: 14

Solution found

0 1 2

3 4 5

6 7 8

Depth: 14

Total execution time: 7746ms

Total search cost (nodes generated): 270

Try again? Enter 1 for yes, other numbers for no

2

Bye!