

Enter the initial state (9 numbers from 0 to 8, space separated): 2 8 3 1 6 4 7 0 5

Enter the goal state (9 numbers from 0 to 8, space separated): 1 2 3 8 0 4 7 6 5

Starting BFS...

Total states explored: 35

States explored in order:

State 1:

(2, 8, 3)

(1, 6, 4)

(7, 0, 5)

State 2:

(2, 8, 3)

(1, 0, 4)

(7, 6, 5)

State 3:

(2, 8, 3)

(1, 6, 4)

(0, 7, 5)

State 4:

(2, 8, 3)

(1, 6, 4)

(7, 5, 0)

State 5:

(2, 0, 3)

(1, 8, 4)

(7, 6, 5)

State 6:

(2, 8, 3)

(0, 1, 4)

(7, 6, 5)

State 7:

(2, 8, 3)

(1, 4, 0)

(7, 6, 5)

State 8:

(2, 8, 3)

(0, 6, 4)

(1, 7, 5)

State 9:

(2, 8, 3)

(1, 6, 0)

(7, 5, 4)

State 10:

(0, 2, 3)

(1, 8, 4)

(7, 6, 5)

State 11:

(2, 3, 0)

(1, 8, 4)

(7, 6, 5)

State 12:

(0, 8, 3)

(2, 1, 4)

(7, 6, 5)

State 13:

(2, 8, 3)

(7, 1, 4)

(0, 6, 5)

State 14:

(2, 8, 0)

(1, 4, 3)

(7, 6, 5)

State 15:

(2, 8, 3)

(1, 4, 5)

(7, 6, 0)

State 16:

(0, 8, 3)

(2, 6, 4)

(1, 7, 5)

State 17:

(2, 8, 3)

(6, 0, 4)

(1, 7, 5)

State 18:

(2, 8, 0)

(1, 6, 3)

(7, 5, 4)

State 19:

(2, 8, 3)

(1, 0, 6)

(7, 5, 4)

State 20:

(1, 2, 3)

(0, 8, 4)

(7, 6, 5)

State 21:

(2, 3, 4)

(1, 8, 0)

(7, 6, 5)

State 22:

(8, 0, 3)

(2, 1, 4)

(7, 6, 5)

State 23:

(2, 8, 3)

(7, 1, 4)

(6, 0, 5)

State 24:

(2, 0, 8)

(1, 4, 3)

(7, 6, 5)

State 25:

(2, 8, 3)

(1, 4, 5)

(7, 0, 6)

State 26:

(8, 0, 3)

(2, 6, 4)

(1, 7, 5)

State 27:

(2, 0, 3)

(6, 8, 4)

(1, 7, 5)

State 28:

(2, 8, 3)

(6, 7, 4)

(1, 0, 5)

State 29:

(2, 8, 3)

(6, 4, 0)

(1, 7, 5)

State 30:

(2, 0, 8)

(1, 6, 3)

(7, 5, 4)

State 31:

(2, 0, 3)

(1, 8, 6)

(7, 5, 4)

State 32:

(2, 8, 3)

(1, 5, 6)

(7, 0, 4)

State 33:

(2, 8, 3)

(0, 1, 6)

(7, 5, 4)

State 34:

(1, 2, 3)

(7, 8, 4)

(0, 6, 5)

State 35:

(1, 2, 3)

(8, 0, 4)

(7, 6, 5)

Number of moves to solve: 5

Moves to solve:

Initial state:

(2, 8, 3)

(1, 6, 4)

(7, 0, 5)

Move 1: Up

(2, 8, 3)

(1, 0, 4)

(7, 6, 5)

Move 2: Up

(2, 0, 3)

(1, 8, 4)

(7, 6, 5)

Move 3: Left

(0, 2, 3)

(1, 8, 4)

(7, 6, 5)

Move 4: Down

(1, 2, 3)

(0, 8, 4)

(7, 6, 5)

Move 5: Right

(1, 2, 3)

(8, 0, 4)

(7, 6, 5)

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