1. 8-Puzzle Problem Using A\* Search
2. Open “astar.m” and run it with command line parameter
3. The parameter represents initial state
4. The INITIAL state could be:

|  |  |  |
| --- | --- | --- |
| 2 | 3 | 5 |
| 7 | 0 | 8 |
| 4 | 1 | 6 |

1. The GOAL(OUTPUT) state for any inputs is:

|  |  |  |
| --- | --- | --- |
| 0 | 1 | 2 |
| 3 | 4 | 5 |
| 6 | 7 | 8 |

1. So run it by typing: astar([2,3,5,7,0,8,4,1,6])
2. Output will be generated after some time
3. How many moves and what moves are necessary to reach to GOAL state will be printed
4. MOVES: 0=UP, 1= DOWN ,2=RIGHT, 3=LEFT
5. For this particular input toal 24 moves are required by A\* search