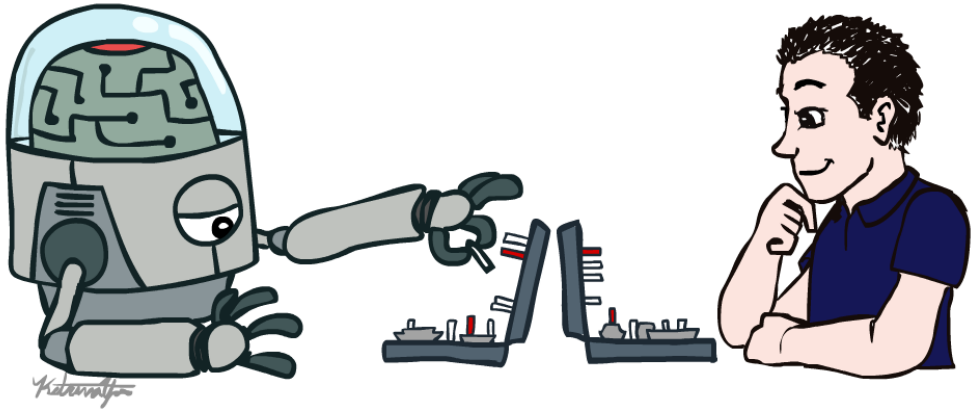
Practice A* search



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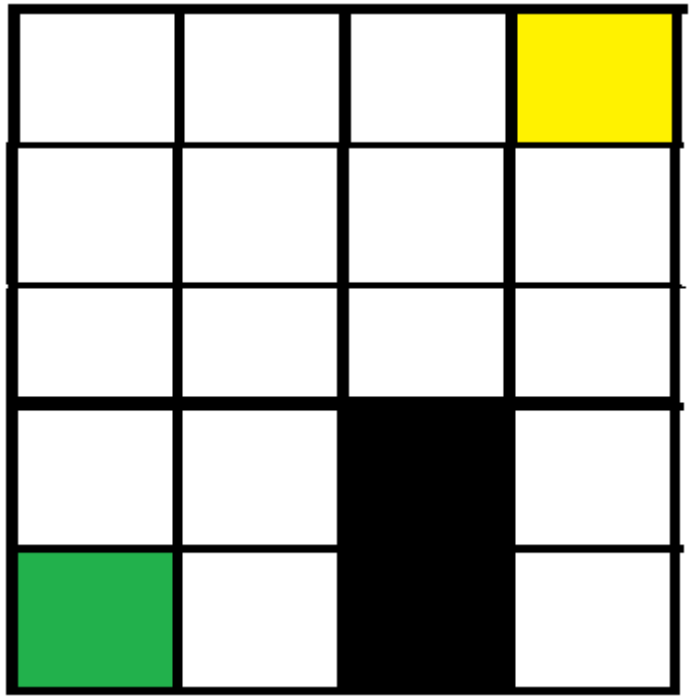
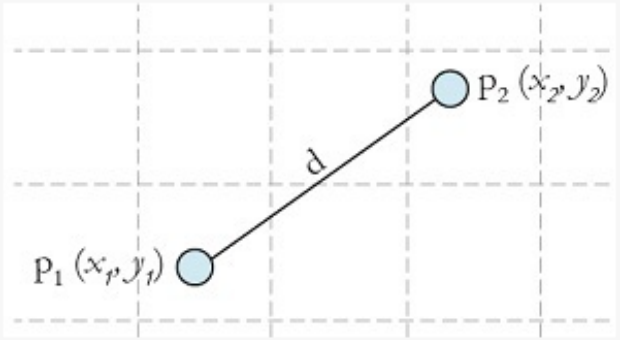
A* search



A* search

The Euclidean Distance Heuristic

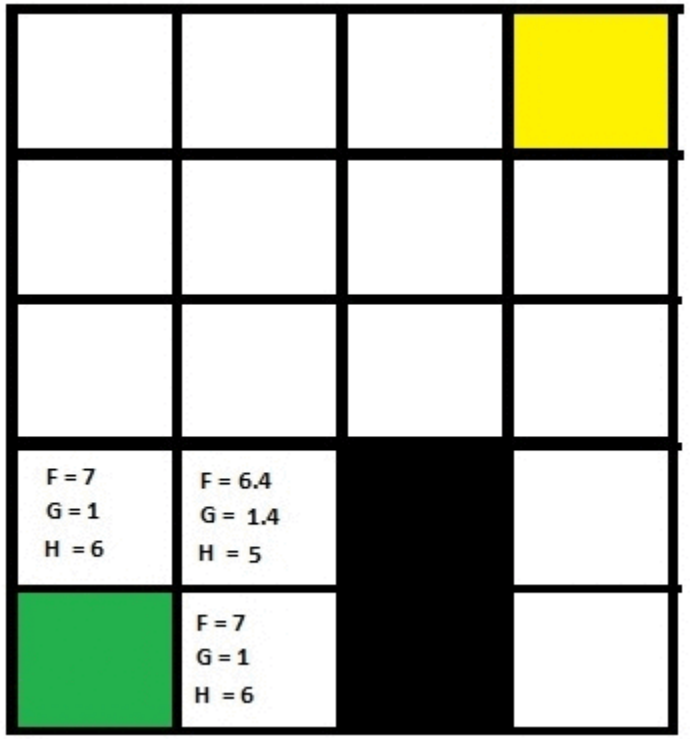


edh

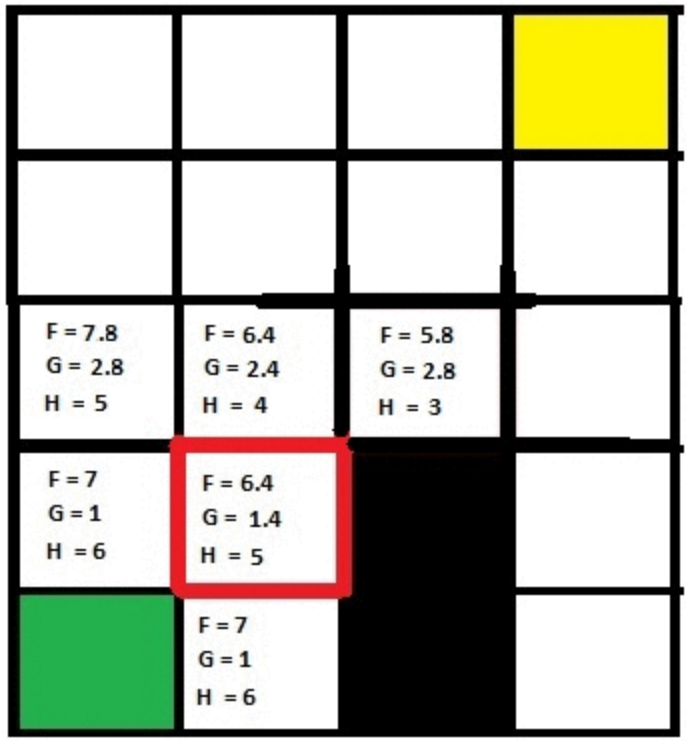
This heuristic is slightly more accurate than its Manhattan counterpart. If we try run both simultaneously on the same maze, the Euclidean path finder favors a path along a straight line. This is more accurate but it is also slower because it has to explore a larger area to find the path.

$$h = \sqrt{(x_{start} - x_{destination})^2 + (y_{start} - y_{destination})^2}$$

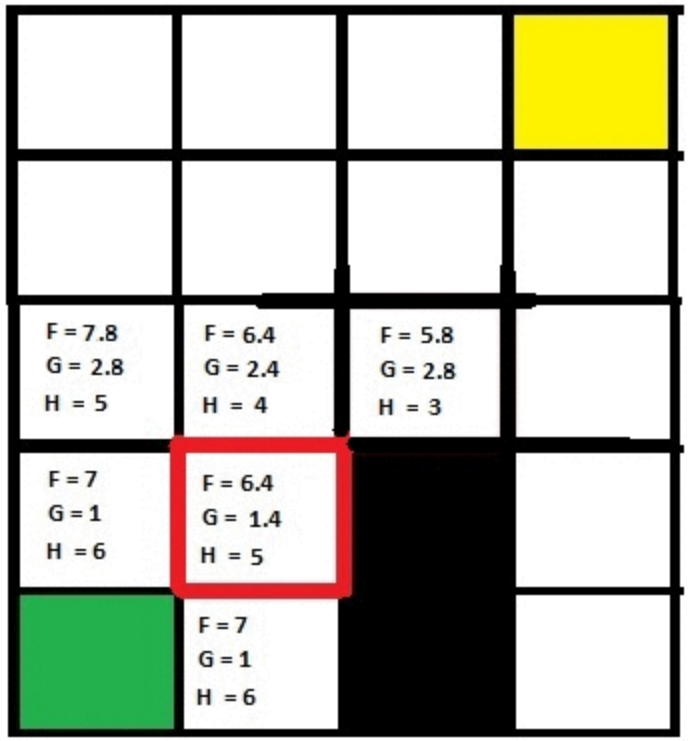
A* search



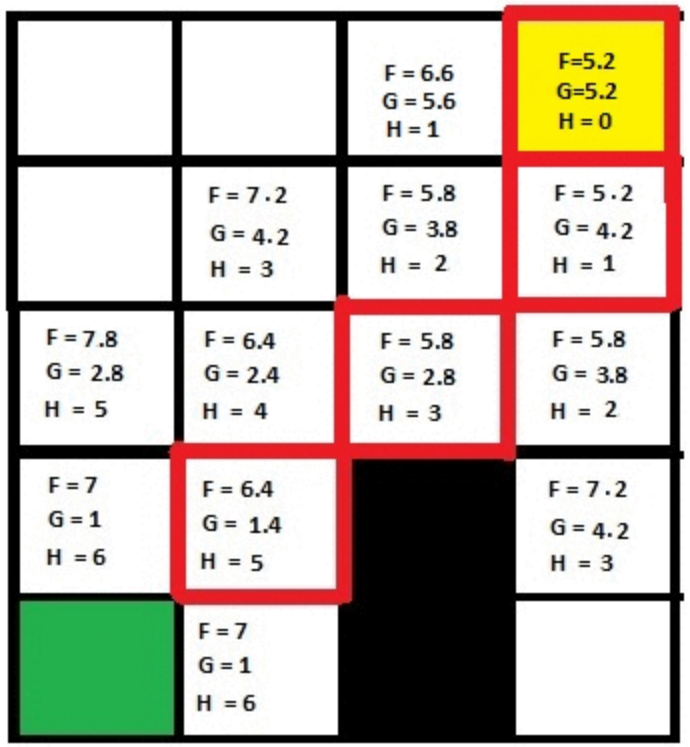
A* search



A* search



A* search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G = 5.6
H = 1
F=5.2
G=5.2
H = 0
F = 7.2
G = 4.2
H = 3
F = 5.8
G = 3.8
H = 2
F = 5.2
G = 4.2
H = 1
F = 7.8
G = 2.8
H = 5
F = 6.4
G = 2.4
H = 4
F = 5.8
G = 2.8
H = 3
F = 5.8
G = 3.8
H = 2
F = 7
G = 1
H = 6
F = 6.4
G = 1.4
H = 5
F = 7.2
G = 4.2
H = 3
F = 7
G = 1
H = 6