

Problem #1: Blocks World Output - Start != Goal

Enter a start state as a comma separated strings, NO SPACES. For example, ro,b or rbo or r,b,o

Enter start state: r,o,b

Enter goal state: rbo

***** Blocks World - Depth First Search *****

current state: [r,o,b,]

current state: [ro,b,]

current state: [bro,]

current state: [rb,o,]

current state: [orb,]

current state: [br,o,]

current state: [obr,]

current state: [ob,r,]

current state: [rob,]

current state: [bo,r,]

goal state: [rbo,]

Number of states visited: 10

***** Blocks World - Breadth First Search *****

current state: [r,o,b,]

current state: [bo,r,]

current state: [or,b,]

current state: [ob,r,]

current state: [rb,o,]

current state: [ro,b,]

current state: [br,o,]

goal state: [rbo,]

Number of states visited: 7

***** Blocks World - Best First Search *****

current state: [r,o,b,]

Sorted states

[rb,o,]

[bo,r,]

[or,b,]

[ob,r,]

[br,o,]

[ro,b,]
current state: [ro,b,]
Sorted states
[rb,o,]
[bo,r,]
[bro,]
[r,o,b,]
[or,b,]
[ob,r,]
[br,o,]
current state: [br,o,]
Sorted states
[rb,o,]
[bo,r,]
[bro,]
[r,o,b,]
[obr,]
[or,b,]
[ob,r,]
current state: [ob,r,]
Sorted states
[rb,o,]
[bo,r,]
[rob,]
[bro,]
[r,o,b,]
[obr,]
[or,b,]
current state: [or,b,]
Sorted states
[rb,o,]
[bo,r,]
[rob,]
[bro,]
[r,o,b,]
[obr,]
[bor,]
current state: [bor,]
Sorted states
[rb,o,]
[bo,r,]
[rob,]
[bro,]
[r,o,b,]

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[obr,]
current state: [obr,]
Sorted states
[rb,o,]
[bo,r,]
[rob,]
[bro,]
[r,o,b,]
current state: [bro,]
Sorted states
[rb,o,]
[bo,r,]
[rob,]
current state: [rob,]
Sorted states
[rb,o,]
[bo,r,]
current state: [bo,r,]
Sorted states
[rbo,]
[rb,o,]
current state: [rb,o,]
Sorted states
[rbo,]
[orb,]
current state: [orb,]
Sorted states
[rbo,]
goal state: [rbo,]
Number of states visited: 12

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Problem #1: Blocks World Output - Start != Goal

Enter a start state as a comma separated strings, NO SPACES. For example, ro,b or rbo or r,b,o
Enter start state: b,o,r
Enter goal state: o,r,b

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***** Blocks World - Depth First Search *****
goal state: [o,b,r,]
Number of states visited: 0

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***** Blocks World - Breadth First Search *****

goal state: [o,b,r,]

Number of states visited: 0

***** Blocks World - Best First Search *****

goal state: [o,b,r,]

Number of states visited: 0

Problem #2 - Manhattan Distance vs Original Output

Manhattan Distance

,dfs,bfs,best
1,1400,2,1
2,1001,4,2
3,2000,13,3
4,2000,26,4
5,1601,45,5
6,1743,73,6
7,2000,141,32
8,1800,254,53
9,2000,381,82
10,2000,635,52

Original Evaluation Method:

,dfs,bfs,best
1,1000,1,1
2,1800,4,2
3,1800,13,3
4,1981,27,5
5,1601,45,6
6,2000,77,50
7,1963,142,258
8,2000,183,399
9,1836,358,527
10,2000,588,414

Problem #1: Jealous Agents Output

***** Jealous Agents - Depth First Search *****

```
current state: {A3,C1,C3,A2,C2,A1},{},0
current state: {A1,C3,A2,A3,C1},{C2},1
current state: {C3,A2,C2,A3,A1},{C1},1
current state: {A1,C3,A3,C1},{C2,A2},1
current state: {A1,C3,A2,A3,C1},{C2},0
current state: {A3,C1,A2,A1},{C3,C2},1
current state: {C2,A3,C1,A2,A1},{C3},0
current state: {A2,C2,A3,A1},{C3,C1},1
current state: {C3,A2,C2,A3,A1},{C1},0
current state: {C3,C2,A2,A3},{A1,C1},1
current state: {A1,C3,A2,A3},{C2,C1},1
current state: {A1,A2,A3},{C3,C2,C1},1
current state: {A1,C3,A2,A3},{C2,C1},0
current state: {C3,A3},{A1,C2,A2,C1},1
current state: {A1,C3,A3,C1},{C2,A2},0
current state: {C1,A1},{C3,C2,A2,A3},1
current state: {A2,C2,C1,A1},{C3,A3},0
current state: {C2,C1},{C3,A2,A3,A1},1
current state: {C3,C2,C1},{A1,A2,A3},0
current state: {C2},{A1,C3,C1,A2,A3},1
current state: {C2,C1},{A3,C3,A2,A1},0
goal state: {},{A3,C1,C3,C2,A2,A1},1
Number of states visited: 21
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***** Jealous Agents - Breadth First Search *****

```
current state: {A3,C1,C3,A2,C2,A1},{},0
current state: {A1,C2,A2,C1},{C3,A3},1
current state: {C3,A2,A3,A1},{C2,C1},1
current state: {A1,A2,A3,C1},{C3,C2},1
current state: {A1,A2,C2,A3,C1},{C3},1
current state: {A1,C3,A2,A3,C1},{C2},1
current state: {A2,C2,A3,A1},{C3,C1},1
current state: {C3,A2,C2,A3},{C1,A1},1
current state: {A1,C3,A3,C1},{C2,A2},1
current state: {C3,A2,C2,A3,A1},{C1},1
current state: {A1,A3,C2,A2,C1},{C3},0
current state: {C3,A2,C2,A3,A1},{C1},0
```

current state: {C3,A2,C1,A3,A1},{C2},0
current state: {A2,A3,A1},{C3,C2,C1},1
current state: {A2,C2,A3,A1},{C3,C1},0
current state: {C3,A2,A3,A1},{C2,C1},0
current state: {A2,C1,A3,A1},{C3,C2},0
current state: {C2,A2},{A1,C3,A3,C1},1
current state: {C3,A3},{A1,C2,A2,C1},1
current state: {A1,C1},{C3,C2,A2,A3},1
current state: {A1,C2,A2,C1},{C3,A3},0
current state: {C3,C2,A2,A3},{C1,A1},0
current state: {A1,C3,A3,C1},{C2,A2},0
current state: {C2,C1},{C3,A2,A3,A1},1
current state: {C3,C2},{A3,A2,C1,A1},1
current state: {C3,C1},{A1,C2,A2,A3},1
current state: {C3,C2,C1},{A1,A2,A3},0
current state: {C2},{A1,C3,C1,A2,A3},1
current state: {C1},{A1,C3,C2,A2,A3},1
current state: {C3},{A1,C1,C2,A2,A3},1
current state: {C3,C2},{A3,A2,C1,A1},0
current state: {C2,A2},{A3,C3,C1,A1},0
current state: {C2,C1},{A3,C3,A2,A1},0
current state: {A1,C1},{C3,C2,A2,A3},0
current state: {C3,C1},{A3,C2,A2,A1},0
current state: {C3,A3},{A2,C2,C1,A1},0
goal state: {},{A3,C1,C3,C2,A2,A1},1
Number of states visited: 36