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Date:

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LAB-04

Hill climbing problem

function HillClimbing(problem) returns local maximum

current \leftarrow initial state problem

loop do

neighbor \leftarrow highest scoring successor of currentif current value \geq neighbor value return currentcurrent \leftarrow neighbor

end loop

4-Queens

			Q
	Q		
		Q	
Q			

State
PAIRS

score

3 1 2 0

2

1 3 2 0

1

 \rightarrow Select this

2 1 3 0

1

0 1 2 3

6

3 2 1 0

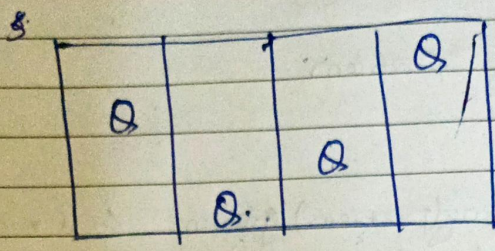
6

3 0 2 1

1

3 1 0 2

1



State	Score
1 3 2 0	1
3 1 2 0	2
2 3 1 0	2
0 3 2 1	3
1 2 3 0	3
1 3 0 2	0 ← return solution

Execute

