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Lab - 4

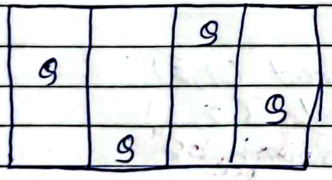
Implement Hill climbing search algorithm to solve N-Queens problem.

```
function HILL-CLIMBING (problem) returns a state
        that is a local maximum.

    current ← Make-Node (problem. INITIAL
                              -STATE)
    Loop do
        neighbor ← a highest-Valued successor
         of current
        if neighbor. Value ≤ current. VALUE
         then return current. STATE
         .
        current ← neighbor.
```

Execute

Implement:

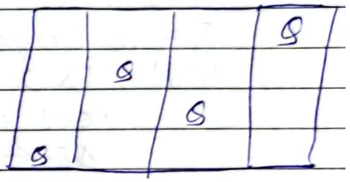


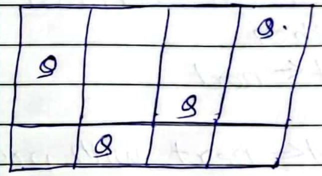
← Goal.

state	score.
3120	2
1320	1
1230	1
1203	1

state	score.
3 1 2 0	9
1 3 2 0	1 → Select
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

Initial state.





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 ← Goal.

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