

Hill climbing search algorithm

function Hill-climbing (problem) returns a state that is a local maximum

current \leftarrow make-node (problem: initial-state)

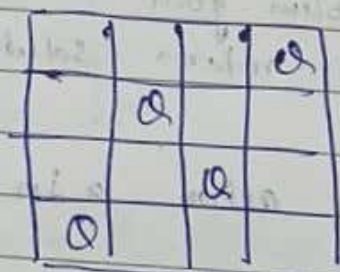
loop do

neighbor \leftarrow a highest-valued successor of current

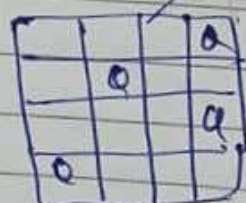
if neighbor.value \leq current.value
then return current.state

current \leftarrow neighbor

Solution:



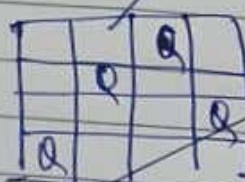
$$h(n) = 2$$



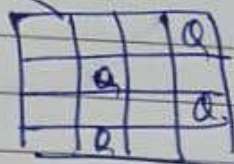
$$h(n) = 2$$



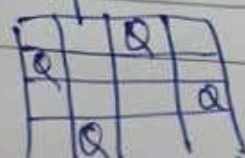
$$h(n) = 3$$



$$h(n) = 1$$



$$h(n) = 2$$



$$h(n) = 0$$

Sun 08.11