

→ Implement hill climb algorithm.

Algorithm:

function hill climb (problem)

return a solution or failure

current  $\leftarrow$  node with state = problem, initial state

loop do

neighbours  $\leftarrow$  a highest-valued neighbour  
current

if neighbour . value  $\leq$  current . value then  
return current // return current state

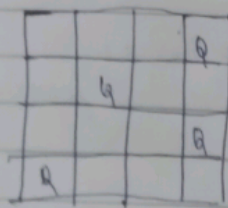
solution

current  $\leftarrow$  neighbour

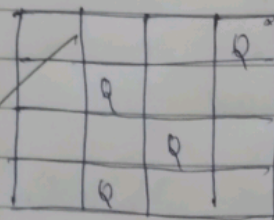
Solution :-



$h(n) = 2$



$h(n) = 2$



$h(n) = 3$



classmate

Date \_\_\_\_\_

Page 9

		Q	
	Q		
Q			Q

$$h(n) = 1$$

			Q
	Q		
Q			Q

$$h(n) = 2$$

		Q	
Q			
	Q		Q

$$h(n) = 0$$

Sent 68-11