UCS1504 - Artificial Intelligence Lab

Department of CSE, SSN College of Engineering

4. Local Search Algorithm

13.09.2022

1. Solve 8-queens problem. Place 8 queens in a chessboard so that no queen is under attack from any other queen. One such "safe" configuration of 8 queens is shown below.

	1	2	3	4	5	6	7	8
1				Q				
2						Q		
3								Q
4		Q						
5							Q	
6	Q							
7			Q					
8					Q			

Implement **Hill climbing algorithm** to find any one safe configuration.

Content to be written in Observation for output verification:

i. **Solve the problem manually** at the back side of your AI class Note

ii. Date

iii. Ex. No

iv. Title

v. Aim v. Data structure used (with justification)

vi. Logic applied or Algorithm (short description)

vii. Sample input and output