

Exp No:01

N - Queens

Aim:

No Queens problem such that no two queens attack each other in NaN chase bound.

Algorithm:

Step-1: Start

Step 2: Initialize the board. Create an NXN chessboard

Steps: Destine the turnsion to check it it the great are placed successfully and print the board

Step4: Define the function to check if the queens are placed successfully and print the board

Step 5: In the trunction, check it the queen is placed scately and for each column in current you.

Step 6: Initialize the NXN board and call the recursive tenction

Step 7: Stop

Program: let is - sate (board, soco, col, n). for in in range Col):
if board [road [i] = = 1: return false for i. i in zip (range (800, -1, -1), range (10), if board LiJLiJ == 1; return face. tor i, j in Zip (range (row, n), range (col, -10);
if board [i][j]==1; return false return True det solve n queens (board colin). it colsen: return True tor (in range (n): It is sate board in colon). board LiJ [colJ=/ if solve - ngueens (board, col+1,n). return True board [i][colJ=0 return Fabe det Point-board (board,n) Print board (board for i in range (n):

tor i in range (n):

Print (range (n) board LiJGJ==[e]

".", end=""") det to n-queens (n). board = [[0 for - in range (n)] for -in range (n)] if not solve - n queens (board o. n); range (n)

		Page
		Print ("Solution does not exist")
		Print - board ! board, n)
		n = int / input ("Enter the Size of the Load.)
		Print-board! board, n) n=int/input ("Enter the Size of the board.") n-queens ()
		Output Enter the Size of the board 4
-1-U)·		
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	00/	Regit: Thus the program for N-quens has been successfully executed
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'n		been Successfully executed