EXP NO: 1 N-QUEENS PROBLEM DATE: AIH: To solve the N-Queen Broblem is to place in queens on a nxn chessboard such that no two queens attack each other. ALGORITATE (or . I Has . bend) 1944 DU - volus Step 1: Start Step 2: Create a nxn ches board with all cells set to 0, representing no queens placed [100] till broad esteps: Ensure no queen is in the same sow, upper diagonalemen lower for a gir de pos Step4: Try plaings of many on each wow of the current cola 94 etto is restale using Steps: More to the next col of placing a queen works, else backtrack by semoring queen. Step 6: If queen are placed insmall columns return Step 8: If no sol. exists, print "solution does not success. 1 Jugar exist". Enter value : 7 det issafe Choord, row, colon): 00000000 PROGRAM: p en range (col): [000,000] of board Trow J[1]==oliono eleo J seturn false; Closo po po for i, j'in zip (range trows -1, -1), range if board TiJTj J==1: e, j'en zépérange craw, 01,-1), range (vol,-1,-1)]
et board E? JEJJ==1; return false · return false

solve NQUARI (boord, col, n): of col>=n: sop spetren true Jose for in range (n) nound-11 at most of really rescale (smooth of an at a board FiJ Col JEE Tout on took house if solve NQUIII (board, colt1, n) = etime Step 1: Start a nxn charlong inrutes all cole set to a. board TiJTcolJ&O.dg snamp on gultiorages « returnus False ni a noup on ensus: 2900 def solveNO (n):

board = [[To] n for with range (n)] of solvenQutil (board, 05, 17) = Fale responding the Constitution of does not exist!) who sold with the sold and sold with the sold and sold with the sold and sold as your for formelier Mossel: beach en near ft prent (9) Step 6 setuan True or 2302 ent C'aput ("enter n value d") ent polyace etquis solve Norch) tring e de 242 los on of 8 9 900 adput 1-Enter value : 5 PROCHAM Ci, 0,0,0,0 Jacla wor, brail else jeb To, 0,0, 190 J: (100) spror 10 9 rot [0,0,0,0] (selo) (selo) (selo) (selo) (selo) (selo) if board list is == 1%