N-QUEENS PROBLEM Ex.No:1 DATE: dul to late Charady nover, where AIM: To solve the N-Queen Problem where the goal is to place n-queens on a nxn theis board which that no 2 queens attack each other ALGORITHM: KEN M PA ZI step 1: start step 2: create a nxn hissboard with all rells set to 0, representing no queens placed. Step 3: Ensure no gueen in same row / upper diagonal/lower diagonal. step 4: Try placing a green in each row of current rolumn if it is safe using safes. step 5: Move to neut rolumn if works else backtrack by removing queen. Step 6: If queins are placed in all rolumns, return surcess. Step 7: Dusplay the board. Step 8: Print Lolution doeint exist if no solution enists.

- 1:0/A-3/H - Arbanena (Raeura PROGRAM: def isdafe (board, now, wol, n): for i in range (vol): if board [now][:] ==1: return false; for i,j in Zip(nonge(novo;-1,-1), nange (col,-1,-1)): J board [i][j] ==1: return false;

for i,j in Zip (nange (row, 1, -1))

ronge (lol; -1, -1)) return true def solveNautil (board, rolgn): Vols=n:
return true in vonge(n): y isdafe (board, i, vol, n): bodrd[i][col]==1
U solveNBrutel (boardg col+1, n)==tnu: return True board[°][vol]=0 return False Step 7: Duskla def dolveNQ(n): board-[[0]\*n for - in range (n)] olve Nautil (Loard, o, n) == False: print (Solution doesn't enist")

return False ina No. 0,2 for i'm board: .print(i) return True; n = int linput ("entern n value:") rolve Na (n') ended district en en els experts de la come OUTPUT: orbidona biond Enter n value: 5 [1,0,0,0,0] the day [0,0,0,1,0] stop o: Initia [0,11,0,0,10] A [0,0,0,0,1] [0,0,1,0,0] [0,0,1,0,0]moste: such is proposed to done of done of the day. Start Sir Pape that the formation of the starte Arison Parent lepine on the property

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