atcheterrate a 8x8 charsboard to initialize deate (0) Set up an open set to explore different 000): Mula Rayeron Configur extrons (c) det up a vioited slate to du play all digeren configuration dief 2. Calculate the number of affecting fours that the greens about not be in the same row dame when or same diagonal Jui atate (i) = = state(1) or aus (state(i). dami vous state (1) == y-1 11 diagonal when Otto Oks + = 1 then we increment the variable attacks to determine atractura paur musico si proportiones de prix for the first i teration. If the pode in not visited then foist hwait to the gier set the open set will push with roup nearly high puch (open ser, node (now start, g, h) defy: we calculate total estimated cost, f= 9th whom of in the current draw in in the mod arracks to reach good sign per mount upon on min ateps: In the main loop remove the node with the www.teast atchs: we now to astermine the next row to place the queen dep : this halopuns up the main book after doing this we gurerous new state wholk g and calculate h

Hill climbers algorithm while chief in the step 1 Place 8 queens randomly such z. Find the attacking fairs such that no we peaced in the same sow, same weumn dami diagonal duef 3: blace & queigns randomly on the cherrioand state = Prandom randing (0,7) for in rounge (8) current attack = calculate attack (state) sky 4: In the frewious state calculate attacks choose one with few attacking four archs: if next-attack > = current attack Greak depolate the current state : next state Though aurent attack in moratack sprior mile rol ately 6: display board Heturn altador Q dy a-dw-3 queens () struct dufile gody individuals cotte Musiki. E Linking stude))) III MERKIN TREAMFROM (Ofern. BLX) oblic war now was isthe יידני ממוש יו איין גאון יישערכתר יישי

A star algorithm amport many class Node: dy_init_ (del, otak, 9, h): aly. atare: ware deg .9 = 9 deg .n = h dey . 1 = 9+h def _ et_ (seef, other): seewen seep. p Lother. P del heuristic (alak). attacks: 0 for i in range (lun (state)): for i in range (it 1, sen (state)): if state (i) == state (j.) or als (state (i)-state) == -1-1: altacks +: L orchurn artades oly a-star-8 queens (); unitial - dtait: ruple ([-1] + 8) Open- set- () healing. healigneish Cohen, set, Node Cinitial - state, 0, rewritic (initial-structe))) united: ou-() while often - set! awvent-node: healt of heapfron (open. set) current - State 2 auruent - node. Italy in current node h == 0 and -1 not in current state; sulvan avount drak

if awant state in visited: Har brighted achos when mensor trayen visited add (convent - atate)

neset - 80w = convent - state . i'ndesc (-1) eg - 1 un continue avoient. state else len couvent. state in ward = 2000 (8. 000 00 (b) state = 11 min 1. for colin range (8): new state: list (avoient strate) new-state (next-xow): co 1 new. Hate = tuple (new-state) ug new state not in visited: 9 = arrent-node g + 1 h = heuritic (new-strate) heapy heappearn (open-out, Noole (new state, 9, 12) (8) Abuse in 2 Log sceturen None (62 6 m) raped (8): def display (stak): auguer o for row in range (8): ablution for colun sounge (8). ij state (row) == col: mid-juil hung floor (i) frunt (hine) restant of the survey - all hade prent() bolution: a = stor-8, queens() only survive (or coto): if distution. for sid sound (3): fruit ("A autumon:") differy (dolution) (8) your no . 2 == franche u fruit ("No solution found")

. policini opodine Hill climbing algorithm dy calculate- attacks (start): () impust random for i'in rounge (lun (atak)): for y in range (it!, con(atate)): (State (i) is state(i) = = deate(j.) or our (state (i) - draft) :(8) Jens: 1:15. attacht; i to the transmit of the state. def hill (): (Hote war) superior to be state: (sandom. sand int (0,7) for- in sange (8)) ca: calcular-attach(ercite) for in range (100): for & in range(8): for e un carge (8): I m IL Konglich y state (row) ! = co !: DENVERT WOODE nes' state (:) h(4) = cn. append (n) next-state: mun (n, key: ealcular-altacks) nust-attacks: calculate-attacks (nusa-, stati) if next-attacks? = current-attacks: State = next - state . ريادا الماني. current-attacks: next-attack xelwin blate, current-offace out diplay (state): hower a some in found for rin round (8): Linking the for c in range (8): i comment, paril ig state [3] == c.

levit: "." f 115 " print (line) invested of sor : juan- () bust-attachs-gloor ('ind ") bush of running of a contract of the attempts 2 100 Inoming & working of (1 gor - in sounce (attempts): 3) see parents mari crited of the someone is a frame when with the if attacks & destattads in a sometime in sind (bust, dolution; dolution Hylpotheria: hust-altacks: altacks if hust actions == 0: " The prider is is in the second." briak quality and the up exit auteurion: fruit (fourt-artacks 3) display (bust-solution) From Lound &: Allen No of Charine eln: i plane & more print ("No solution found") gustar son t mark output: Bent aboution found de journal rive Sieur South I is its will know Q . France e +: Q. 2 100 r Ga Est with any part with . o o d . e . s