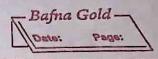
Englement Sinulated Annealing to solve N-queens problem ALLORITHM: function EVALUATE (State): n < length of state attacks - 0 for i from 0 to n-1: for i from it 1 to n-1: if state [i] = = state[j] or abs (state[j] -State [j] => abs (i-j): affects & affects +1 return altacks function RANDOM-HEIGHBOR (State): n + length of state new\_State < copper State col = random integer between o End row-conflits = II. for each you four o to n-1: f your # State [col]; thup god topy of new state wills hew\_state [coi] = row row- conflicts append ((sow, Ev monte (injuster) if now-lowfitts 13 not empty: best rous & row neith week would in your-enflius seter on men, stars



function SCHEDULE (t):
Yetorn: MAX (0:01, min(1,1-0:05+t)) function SIMULATED\_ANNEALING (State) may-thatia) for t four to mor-iteration: T = scheoule (+) 1 Tr= 0: 12 12 12 noton state, t conclidate & RANDOM-NEIGH BOR (State) E = EVALUATE (canalidate) - Evoluate (state) state - tardidate pro 5 = exp / (T "1.5) of raidon () 2 prob 3 state = carolidate of tuninge (stair) == 0 print l'alobal mar force at l't sotom state, t print (" Reached Cocal movimum, fusicit Hoth!" report state montitivation fuction SOLVE-N-QUEENS (n): i wind state & array of a vardon itage on the Venut, pration <- SI MULATED - MINEMING (Insticu- state nav- Huarian = 5 000) your youts thation

fliction PRINT-Bones (scar): for you from b to not. for col from a to hal if state (col ) >> row line - 11ne-"0"; else: pres (em) 1 maineral NE ver i ppot " Enter me of queus" Sourcon, thousand SolvEN - QUEEN S(N) print (" sol for" no request find at " iteraria PHWZ Bottab (solvion) - print ( france waiendry, Francist ( soution)) futer no of open (N) - 8 awhar narious man affect ford at steration 902 Soution for 8 queen in 902 iteration Final evaluation (objeture from or vou