# Assignment #1

N-Queens

The N-queens problem is to place N queens on an N-by-N chess board so that none are in the same row, the same column, or the same diagonal.

The goal of this assignment is to solve the N-queens problem using hill climbing and simulated annealing.

Methodology

Make sure your tool (GUI) has the following:

- Allow the user to enter the size of the board (4-8)
- Allow the user to select the search algorithm (Hill Climbing, Simulated annealing)
- Each time locate the N queen locations randomly
- If the selected algorithm was simulated annealing.
  - Set some parameters like initial temperature, cooling rate, maximum iteration (or final temperature)
- Display iteration, temperature, and queens final order
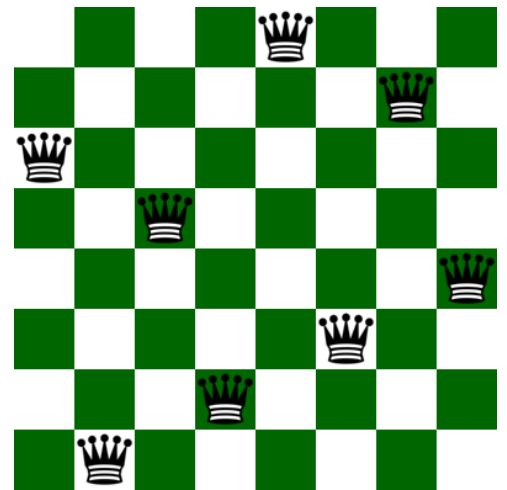
Languages

You may use the programming language that you prefer, <u>BUT NOT PYTHON</u>

Marking scheme

Look and feel of interface	5	Algorithm implementation	5
Quality of design and coding	5		