Solving the N-Queens Problem Using Multiple Algorithms

The problem we have chosen to work on is the **N-Queens Problem**, which is a classical problem in artificial intelligence and search algorithms.

The objective of the problem is to place N queens on an N×N chessboard in such a way that no two queens attack each other, meaning that no two queens share the same row, column, or diagonal.

The project work was divided among the team members as follows:

- **فاطمة اشرف محمد علي علي الفار(c3):** Implementation of Genetic algorithm.
- **هاجر علي السيد الدخميسي(c5):** Implementation of BFS algorithm.
- **بسنت احمد عطيه(c2):**Responsible for preparing the report.
- **ولاء فتحى عبدالجواد عبدالمقصود(c5):** Implementation of DFS backtracking algorithm.
- **إسراء محمود محمدحبيش(c1):** Implementation of Hill Climbing backtracking algorithm.
- **ايه محمود محمد حبيش(c2):**Implemented the N-Queens problem and the main execution file.