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## **Project Report: N-Queen Problem**

## Introduction

The N-Queen problem is a classic combinatorial problem that involves placing N queens on an N×N chessboard such that no two queens threaten each other. This means that no two queens can share the same row, column, or diagonal. The goal of the implementation is to find a valid arrangement of queens using the backtracking algorithm.

## **Rules:**

- 1. No two queens can be in the same row.
- 2. No two queens can be in the same column.
- 3. No two queens can be on the same diagonal.
- 4. The placement should cover all N queens on the board without violating the above constraints.