

Backend Development- Week2

Week 2

▼ CP Question-

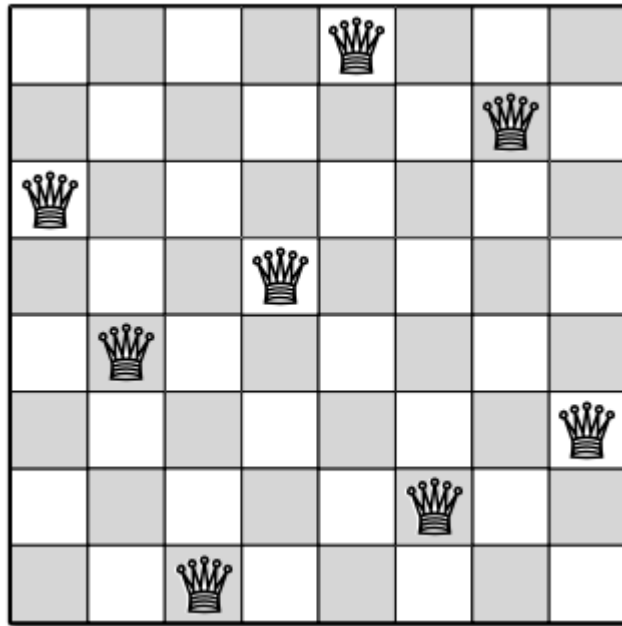
Question- N Queen Problem / Return all Distinct Solutions to the N-Queens Puzzle

The n-queens is the problem of placing n queens on $n \times n$ chessboard such that no two queens can attack each other. Given an integer n, return all distinct solutions to the n -queens puzzle. Each solution contains a distinct boards configuration of the queen's placement, where 'Q' and '.' indicate queen and empty space respectively.

Examples: Input: n = 4

Output: `[[".Q..","...Q","Q...","..Q."],["..Q.", "Q...", "...Q", ".Q.."]]`

Explanation: There exist two distinct solutions to the 4-queens puzzle as shown below



▼ Coding Challenge-

- Implement a Student class with attributes for name and grades. Provide methods to add grades, calculate the average, and display student information.
- Concatenate two strings.
- Create a program to track monthly expenses and categorize them (e.g., food, transport, entertainment).