

# N-Queens' Problem in Ocaml

## Description

This project implements a solver for the classic **8 queens problem** using **OCaml**. The goal of the problem is to place 8 queens on a standard 8×8 chessboard such that no two queens threaten each other — meaning no two queens can share the same row, column, or diagonal. This solution can be expended to N queens problem within the computational limits of the computer, of course.

## Features

- **Board Representation:**  
The chessboard is implicitly represented using a list of positions (position list), where each position is a tuple (row, column).
- **Conflict Detection:**  
The function `en_conflit` checks whether two queens are attacking each other by comparing rows, columns, and diagonals.
- **Recursive Placement:**  
`placer_reine` recursively tries to place n remaining queens on the board without conflicts.
- **Backtracking:**  
The algorithm uses **backtracking** to explore valid positions for each queen. If a conflict arises, it tries a different position.
- **Displaying the Solution:**  
The function `afficher_solution` prints the final board, marking queens with Q and empty squares with -.