Lab 004

This program tackles the classic **N-Queens puzzle** using backtracking.  
It carefully places queens on an N×N chessboard so that none of them can attack each other.  
The solver tries different positions row by row, only keeping the safe ones.  
Each valid solution is shown with "Q" for queens and "." for empty squares.  
In the end, it displays all the possible arrangements along with the total count.