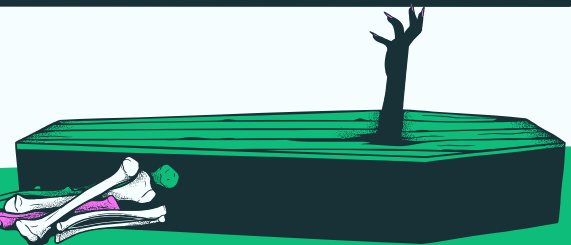
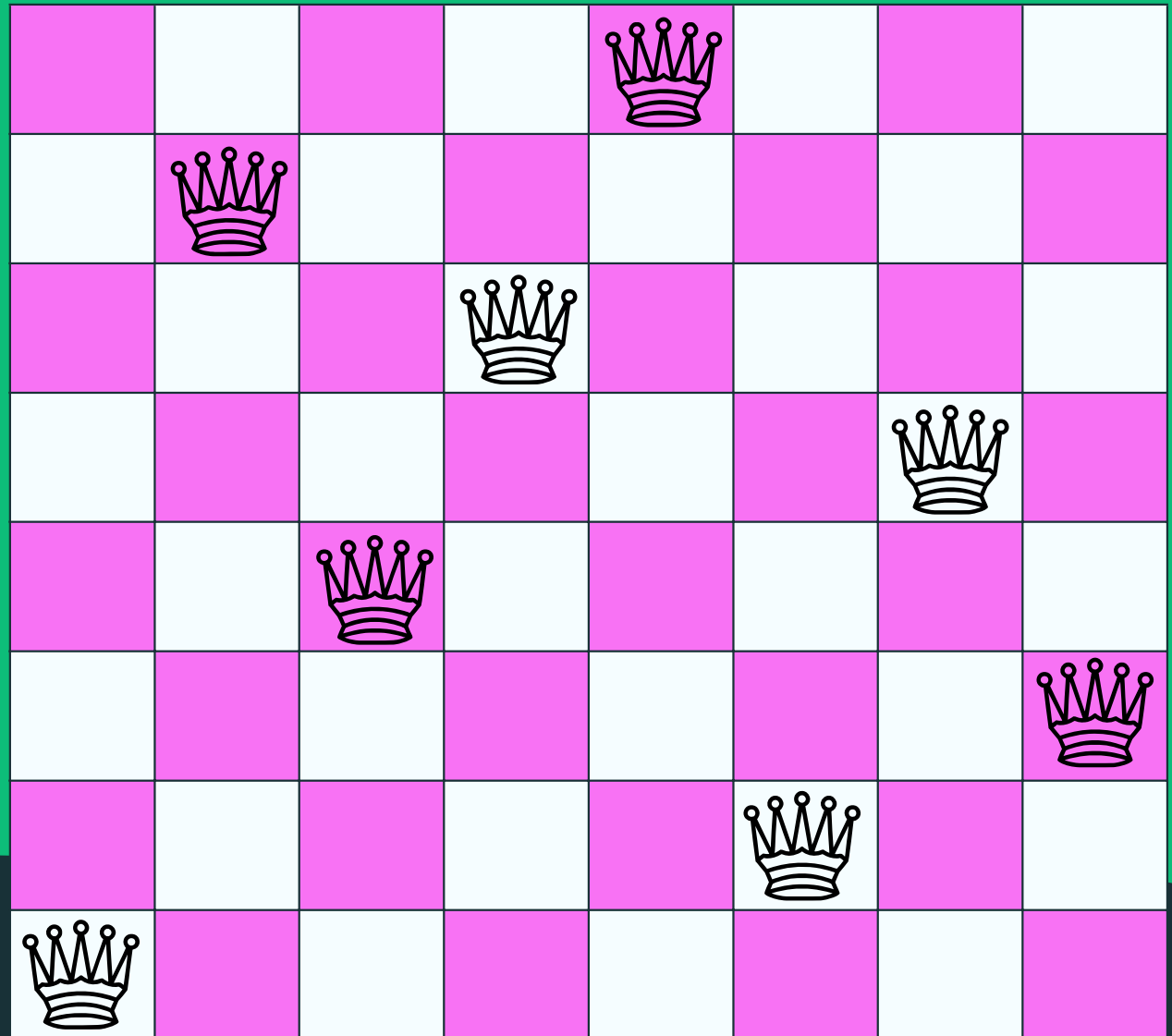


Backtracking

Backtracking is a general algorithmic technique that explores all possible configurations to find a solution to a computational problem. It "backtracks" to the previous step to try a different path



Solving the 8-Queens Problem with Backtracking



SOLUTION:

1. Start in the Leftmost Column
2. Place a Queen in the Current Column
3. Check for Threats
4. Backtrack if Necessary
5. Repeat
6. Found a Solution



SUMMARY

Through backtracking, the algorithm efficiently navigates the solution space, avoiding *entire* subsets of configurations that cannot possibly lead to a valid solution, and ultimately finds the solution to the 8-Queens problem.



Thank you!

