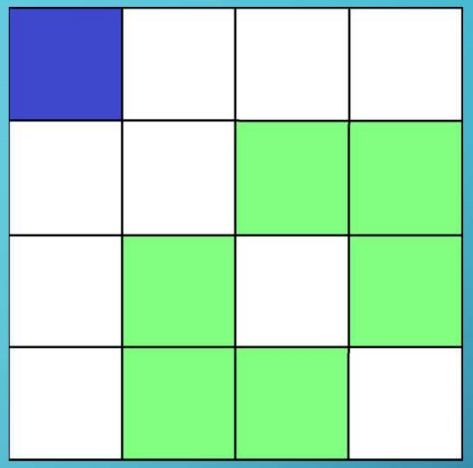
N-QUEENS THROUGH CSP IN KOTLIN

COREY REICHEL

N-QUEEN'S PUZZLE

Place N queens on a N*N

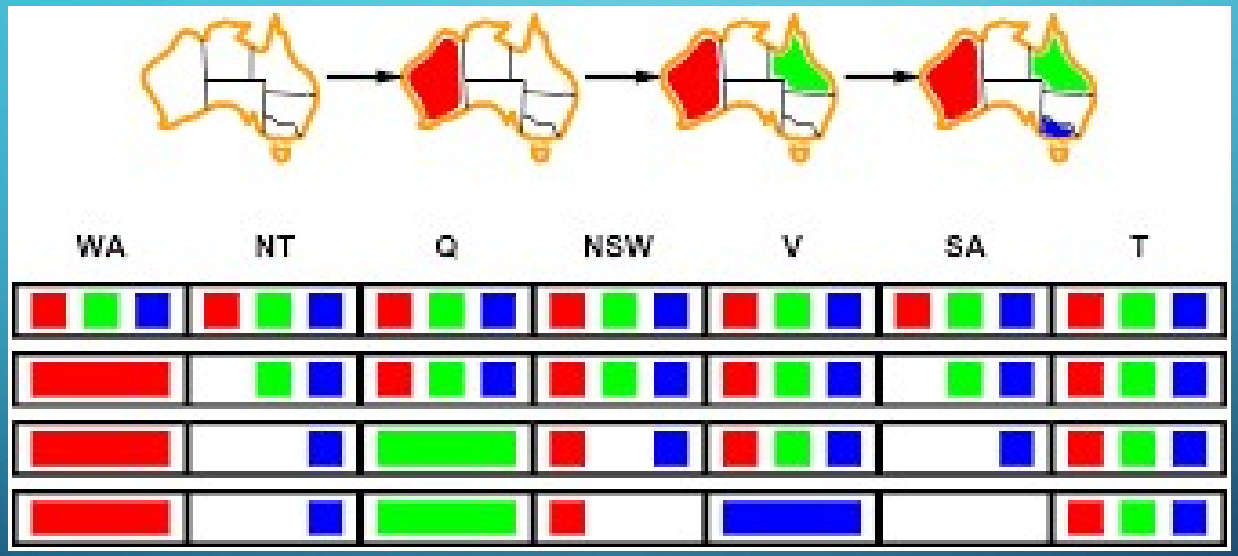


Cannot occupy the same Row, Column, Diagonal, Anti-diagonal

CONSTRAINT SATISFACTION PROBLEMS

- State: All variables and their values that denote a static environment
  - Number of queens, where they are placed etc.
- Action: How to move from state to state
  - Place a queen
- Constraints:
  - Row, col, diag, anti diag,
- Solution: A state that has N queens and follows the constraints

FORWARD CHECKING



ARC CONSISTENCY

- After initial trim (from forward checking)
- Check the implications of the current state
  - Repeat until no new implications arise