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Advanced Topics in Computer Science

Day 8 Notes

* Warmup:
  + How to solve:
    - Random guesses
* Constraint Satisfaction:
  + A way of modeling problems as a set of three things
    - A set of variables.
    - A set of values we can assign to each variable.
    - A set of constraints that must be satisfied.
      * (for sudoku: no two numbers in a row/column/block)
  + Read world example:
    - Temporal reasoning
    - Planning
    - Vision
  + Algorithms that work:
    - Backtracking
    - Forward checking
    - Constraint propagation
* N-Queens
  + We can use search algorithms.
  + We only need a one-dimensional array as each queen
* Forward Checking
  + For sudoku we have the little numbers in the square
  + For N-Queens a list with where I can put queens