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CS325: Analysis of Algorithms

Homework 4

* 1. MaxSet.py
  2. Time complexity: O(N) – bottom up dp runs in linear time as does forming the result array.
  3. PowerSet.py
  4. Time complexity: O(N \* 2n) – we generate the power set with our backtracking algorithm in 2n time, but we’re also copying over list to our answer array which is an O(N) operation.