Review Session
Please fill our course evaluations!
Next Week

• Monday: No class
  • My Office hours Canceled
• Tuesday: Bounds on what a computer can do
• Wednesday: Machine Learning
• Thursday: Wrap up
Exam Topics

• Cumulative, but emphasis on topics since the first midterm:
  • Pointers, Pointers-by-reference
  • Linked Lists
    – create, destroy, traversal, insert, remove, Big-O runtime
  • Dynamic Arrays
    – create, destroy, growing, Big-O runtime
  • Binary Search Trees
    – create, destroy, search, Big-O runtime
  • Tries
    – create, destroy, search, add, remove, Big-O runtime
Exam Topics

- Cumulative, but emphasis on topics since the first midterm:
  - Hashing
    - good, bad, using a hash function, Big-O runtime
  - Implementing Queue, Stack, Vector, Set, HashMap, Lexicon
  - Graphs
    - BFS, DFS
    - No MST, Dijkstra's or A*
Exam Topics

• Stuff that's likely to come up from the first half of the quarter:
  • Big-O Runtime
    – Worst case vs. Best Case vs. Average Case
    – \( O(n) \), \( O(n^2) \), \( O(\log n) \)
  • Exhaustive Recursion
    – subsets, permutations, combinations
Let's do some practice problems