

Topics to Study for Exam November 25, 2025

1. Hashing
2. graphs and digraphs and calculating strong components.
3. Kruskal's algorithm, union/find
4. Graham's algorithm for convex hull
5. Computability issues. Parallel processors, time complexity, space complexity, and deeper issues.
6. Finding complexity of recurrences and code fragments.
7. Memoization.
8. Loop invariants.
9. Maximal monotone subsequences.
10. Dynamic programming, including edit distance.
11. Binary search trees, treaps, stacks, queues, arrays.