

Final Exam Review

1. Dynamic Programming (Chapter-6)
 - a. Minimum Edit Distance (sec. 6.3, also [see in-class exercise](#))
 - b. Longest common Subsequence (also see [in-class exercise](#))
 - c. Assembly line scheduling (refer to [class handout](#))
 - d. Longest increasing subsequence (refer to [in-class exercise](#))
2. Growth of functions
3. Greedy Algorithms (Chapter-5)
 - a. Huffman encoding (sec. 5.2 page 138)
 - b. Minimum spanning Trees Problem
 - i. Kruskal Algorithm (sec. 5.1.3 (also see [Solution to homework-3](#), Problem 1)
 - ii. Prim Algorithm (sec. 5.1.5)) (also see [in-class exercise Problem 2](#))
4. Single Source Shortest Path Problem (Chapter-4)
 - a. Dijkstra Algorithm (sec. 4.4)
 - b. Bellman Ford Algorithm (sec. 4.6, page 118) (also see [in-class exercises Problem 1](#); [Solution to homework-3](#), Problem 2)
5. Chapter-7
 - a. Flow in Networks (sec. 7.2) (also see [in-class exercise](#))
 - b. Bipartite Matching (sec. 7.3)
6. Chapter-3
 - a. Depth First search in undirected graphs (sec. 3.2) (also see [in-class exercises](#))
 - b. Depth First search in directed graphs (sec. 3.3)