

Exercises

- asymptotic notation
- simple recurrences
- application of the master theorem
- comparing running times

Theory

- Elements of graph theory: first two lectures (see material, some parts are excluded). Algorithms: BFS, # of walks of length k .
- Asymptotic notation
- Divide and Conquer strategy and sorting algorithms: insertion sort, merge sort (just pseudocode), binary search algorithm
- Master theorem

The material contained in the lectures notes is sufficient.