
CSC 284/484 Advanced Algorithms - homework 1

- EXAM 1 (Tuesday, Feb 8th) will consist mainly of the problems listed below (plus the problems for the data structures part).
- Do solve the problems but do NOT turn your solutions in (we will use a problem session as a feedback mechanism).
- IMPORTANT: print this sheet, write your name on it, mark the problems you solved, and hand me the sheet before EXAM 1.

Background material:

CLRS exercises: 3.1-1, 3.1-2, 3.1-3, 3.1-4, 3.1-5, 3.1-6, 3.1-7, 3.2-1, 3.2-3, 3.2-4, 3.2-5, 3.2-8.

CLRS problems: 3-1, 3-2, 3-3, 3-4.

CLRS exercises: 4.3-1, 4.3-2, 4.3-3, 4.3-6, 4.3-9, 4.5-1, 4.5-3, 4.5-4.

CLRS problems: 4-1, 4-3, 4-6.

Main Topic (randomized algorithms):

CLRS exercises: 5.2-1, 5.2-2, 5.2-4, 5.2-5, 5.3-3, 5.3-4, 5.3-7.

CLRS exercises: 5.4-1, 5.4-2.

CLRS problem: 5-1.

MR95 problems: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.10, 1.11.

MU05 exercises: 1.3, 1.4, 1.6, 1.8, 1.10, 1.11, 1.15, 1.17, 1.19, 1.21, 1.23.

MU05 exercises: 2.4, 2.5, 2.6, 2.7, 2.8, 2.13, 2.15, 2.18, 2.19, 2.22, 2.27.

MU05 exercises: 3.3, 3.7, 3.10, 3.16, 3.19.

MU05 exercises: 4.1, 4.2, 4.3, 4.4, 4.5, 4.9, 4.11, 4.13.

Babai exercises: 2, 4, 5, 7, 8, 15, 16, 28, 29, 31.