Institut for Matematik og Datalogi
Syddansk Universitet

November 12, 2003
JFB

DM19 – Algorithms and Complexity – E03 – Lecture 11

Announcements

You can learn about career possibilities at KarriereKick, December 1, 15:00–17:00. There is information about it at

http://www.sdu.dk/Nat/fak/projekter/karrierekick/index.php.

Lecture, November 10

We finished with NP-completeness and began on approximation algorithms from chapter 35 in the textbook, covering section 35.2.1 and introducing some terminology.

Lecture, November 17

We will continue with approximation algorithms from chapter 35 in the textbook.

Lecture, November 24

We will finish approximation approximation algorithms from chapter 35 in the textbook and begin on brand-and-bound from the second set of notes.

Problems to be discussed in week 48

- 35.1-1, 35.1-3, 35.1-4, 35.1-5.

- 35.2-3, 35.2-5. (For problem 35.2-3, assume that the triangle equality holds. Is that necessary? As a hint, notice the similarity to Prim's algorithm for MST.)
- Explain how to make the approximation algorithm given for vertex cover on page 967 run in time $O(|E|)$.
- 35.3-5.
- 35-1. (For part a of 35-1, you might consider reducing from the set-partition problem which is defined in exercise 34.5-5.)