DM19 – Fall06 – Weekly note 4

Announcement

Jack Edmonds, one of the founders of combinatorial optimization and the farther of many important notions that are considered standard now, will be appointed Doctor Honoris Causa at SDU at the annual celebration on October 6th. He is visiting IMADA all of next week and will give a lecture in the seminar room on Wednesday October 4th 14.15-16. Anyone interested in meeting one of the true giants (he is also quite tall and speaks loudly) is encouraged to come to his talk.

Stuff covered September 27, 2006

- Amortized analysis. Sections 17.1-17.3.

- Binomial heaps. Chapter 19. We will not cover everything, some of it will be left for self study. What we need is a basic understanding that can lead up to Fibonacci heaps which we will cover next time. You should recapitulate the definition of a binary heap from DM02.

Exercises October 3, 2006

- Discuss the potential method for the example of incrementing a binary counter page 415.

- 17.3.1

- Problem 17.2 page 426. Hint: recall the operations of binomial heaps.

- Problem 9.2 (a)-(d) page 194 in Cormen et al.

- 19.2 page 474

Lecture October 4, 2006

- Fibonacci Heaps. Chapter 20.

- Huffman codes. Chapter 16.3.