DM19 – Algorithms and Complexity – E03 – Lecture 5

Lecture, September 22

We covered sections 3.3 and 3.5 of the first set of notes, plus median finding from chapter 9 (sections 9.2 and 9.3) in the textbook. We began on chapter 17 on amortized analysis, covering section 17.1.

Lecture, September 29

Paul Medvedev will finish the KMP algorithm for string matching. We will cover sections 17.2 and 17.3 on amortized analysis and begin on Fibonacci heaps from chapter 20.

Lecture, October 6

We will finish with Fibonacci heaps, cover Huffman codes from section 16.3 in the textbook, and begin on NP-completeness from chapter 34 in the textbook and the section by Papadimitriou and Steiglitz from the first set of notes.

Problems to be discussed in week 41

- 32.4-1, 32.4-3, 32.4-5

- 17.1-2, 17.1-3, 17.2-1, 17,2-3, 17.3-2, 17-3-7, 17-3.

- 3.2-7

- 20.2-1, 20.2-3, 20.2-5.