

On-Line Algorithms – F05 – Lecture 12

Lecture, April 26

We covered up through section 9.3 of chapter 9 in the textbook.

Lecture, May 3

We will cover section 9.4 and then through section 10.4 of chapter 10.

Lecture, May 10

We will look at the algorithms in sections 10.6 and 10.7, but skip the proofs. Then we will cover through section 12.2 of chapter 12.

Problems for May 9

1. What is the complexity of the dynamic programming procedure used for computing the cost of an optimal offline algorithm for the k -server problem when the request sequence is of length n . For the special case of a uniform metric space a faster algorithm exists. What is its complexity?
2. Define and analyze a lazy version of DC for paging.
3. Exercise 10.1.
4. In section 10.2.2, there is an example where the Greedy algorithm does miserably. How does the WFA perform on this example?
5. Exercise 10.8.