

On-Line Algorithms – F09 – Lecture 3

Lecture, April 15

We continued with chapter 1 in the textbook, covering up through Lemma 1.3.

Lecture, April 27

We will finish chapters 1 and 2 in the textbook.

Lecture, May 1

We will begin on chapter 3 in the textbook.

Problems for May 4

1. Exercise 2.1 in the textbook.
2. Exercise 2.3 in the textbook (but only for the static case).
3. Show that there is a request sequence on which BIT's performance ratio is no better than $\frac{7}{4}$ in the partial cost model. (It is sufficient to look at lists of length 2.)
4. Do Exercise 2.4. Note that the lower bound will depend on p , rather than being $2 - \epsilon$.
5. How do you define BIT and COMB in the dynamic model?
6. Do Exercise 2.5 in the textbook.