Institut for Matematik og Datalogi
Syddansk Universitet

February 11, 2019
JFB

On-Line Algorithms – F19 – Lecture 4

Lecture, February 11

We finished chapter 1.

Lecture, February 13

We will begin on chapter 2.

Lecture, February 19

Kim Skak Larsen will cover chapter 3 and begin on chapter 4.

Problems for February 20

1. Problems that we didn't finish on February 18.
2. Do Exercise 3.2 in the textbook.
3. Do Exercise 3.3 in the textbook.
4. Do Exercise 3.6 in the textbook.
5. Do Exercise 3.7 in the textbook.
6. Do Exercise 3.8 in the textbook.
7. Do Exercise 3.10 in the textbook.
8. Prove that for any pair of deterministic lazy paging algorithms, A and B, any sequence length n, cache size k, and memory size N, for any number of faults s, the number of sequences of length n where A has s faults is equal to the number of sequences of length n where B has

s faults. Do this by induction on the length of the sequence, n, by finding a bijection f which maps sequences where A has a particular number of faults to sequences where B has the same number of faults.