Weekly Note 2 - Week 7

06 February 2018

Lecture - Tuesday, 13. February

16-19 in U24
The topic for this lecture is External Sorting, i.e. chapter 13. Here we will study external mergesort, that can be used when we have a dataset for sorting that is larger than can fit in main memory.
I will also give an introduction to the first project.

Tutorial session - Wednesday, 14. February

8-10 in U24 (The following weeks we are away from this horrible timeslot)
This tutorial session will focus on the material covered in the lecture, i.e. exercises on Chapter 13.
Preparation:
Consider these two questions:

1. Explain the general external merge sort algorithm. Discuss the length of initial runs, how memory is utilized in subsequent merging passes and the cost of the algorithm.
2. Discuss the use of replacement sort to increase the average length of initial runs. How does this affect the cost of external sorting?

Try also to make a list of 10-15 keywords for a 10 minute presentation with the topic: "External Sorting".
In Class
Spend the first part of class preparing these exercises from the book:

- 13.3
- 13.4

Discuss the above exercises.
Discus the keyword list you prepared at home. There is not a single right answer, as you could plan many great presentations with different "red-threads".

Recommended Reading

- Chapters 13

Material (Slides, etc.)

- Slides for lecture 2