DBM1
Final remarks

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Course outline

- ~~Databases fundamentals~~ **Done!**
- ~~Relational algebra~~ **Done!**
- ~~SQL language~~ **Done!**
- ~~Database internals~~ **Done!**
- ~~Distributed databases~~ **Done!**

Evaluation

- SQL has been evaluated through lab #1.
- Final exam (next Friday, 2 to 4pm) will evaluate the remaining skills.

- Final mark is half the lab, half the exam.

Final exam

- It will evaluate the following skills:
  - Writing relational algebra expressions
  - Writing basic relational algebra equivalences
  - Explaining physical query plans and reasoning with costs
  - Fragmenting (horizontally and vertically) a database schema
  - Understanding the goals of NoSQL databases, and argumenting such a choice
- You are expected to be able to read/write SQL, but it will not be the main focus of the exam.
- You are not expected to be able to explain the internals of a NoSQL database or the MapReduce framework.

Final exam (cont'd)

- You can use any printed or digital document you want (those I gave you and everything else you think might help you).
- Computers/tablets/smartphones are allowed.

  $\Rightarrow$ They should be used only to read documents, not to communicate with others.

  $\Rightarrow$ I will require you to shutdown any communication capability (i.e., switching plane mode on and disabling cellular network/Wi-Fi/etc) before the exam.

  $\Rightarrow$ As a consequence, you should download any resource you expect to use before the exam.

Today’s lab

- Not evaluated, but completing it will help towards a successful exam.
- Two parts: query processing and distributed databases.

- The first part consists in autonomous work to better understand the use of indexes and query processing/optimization.
- The second part consists in the reading and understanding of a research paper giving solutions to handle data replication at Yahoo!.

SQLDeveloper setup

- User "IST*"/pass "mdpIST*-2015", where * ranges from 01 to 22.

- In the preferences, under Databases > Execution plans, enable the display of the predicates and the projections.