



PA220: Database systems for data analytics

Home Assignment 3

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Optimize Analytical Queries

- Optimize all the queries from the HA2
 - so their evaluation is at least 10x times faster
 - If you are not successful, mention it in the comment and try to judge why.
- Prefer generic solutions applicable to more queries
 - creating just materialized views for all the queries is not enough
 - if so, I will require you to state how often the query must be executed to save resources before the view must be reevaluated.

Submission of Assignment 3

- Hand in to the IS vault:
 - ZIP archive with txt files per query,
 - the txt file named `optimizedN.txt` will contain
 - original SELECT command,
 - result of EXPLAIN ANALYZE (plan plus execution time) for the original query,
 - comment on the optimization proposed,
 - implemented optimization (indexes, modified query, ...),
 - result of EXPLAIN ANALYZE (plan plus execution time) after the optimization.
- Grading
 - 2 pts per query
 - total 10 pts