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Project3

Optimization Report

In this project, we mainly applied three optimization techniques, batch insert and disabling auto-commit, and caching.

Batch inserts: Initially, we loaded the database without these techniques in project 1, and it took the laptop about three hours to complete inserting. Because this is only a rough estimation, we cannot calculate the actual time improvements, but the insertion of about 10000 movies using batch insertion took us approximately 1 minute, which means that the optimization is successful.

Disabling Auto commit: With auto commit disabled, we reduced the overhead that the database introduces with each insert call that writes to the disk.

Caching: Instead of writing queries to communicate with database, we returned the values along with the insertion and kept them local for later reference.