CSL 451 Introduction to Database Systems
Graded Lab 2 Due by March 5, 2015, 11.59pm

Instructions

- You are free to use C or Java for writing the programs. The backend has to be PostgreSQL. While you are expected use the rating database provided in the ungraded lab, you are free choose any other database as well. If you use any other database, please include it in your submission.
- You are allowed to work in pairs to complete this graded lab.
- The submission must be a zip file with the following naming convention - rollnumber1_rollnumber2.zip
- Include appropriate comments to document the code. Include a `read me` file containing the instructions on how to compile and execute the code. The code should run on institute linux machines.
- One of the team members can upload the zip file to his/her moodle account.

Write a relational algebra interpreter that will take relational algebra expressions as input from the user, automatically converts them to SQL the queries, executes the queries on the database server, and outputs the results of the query to the user. Your application should support the following relational algebra operations

1. select *predicate* relation
2. project *column list* relation
3. naturaljoin relation1 relation2
4. cartesianproduct relation1, ..., relationK

The value of *predicate* and *column list* can be passed as is to the SQL engine.