

CMPS180 Winter 2016 Midterm review

Topics covered: All lectures up to SQL modifications, views, transactions will be included. There will be 4 questions.

Question 1. Multiple choice questions. 12 of them.

Question 2. Understanding of the relational model, the concept of an instance, key etc.

Question 3. SQL DDL and DML. How to create tables, how to query one or more tables. Relational Algebra.

Question 4. Relational Algebra. Potpourri.

Look at the practice homeworks for the style of questions.

Helpful questions:

1. Who invented the relational model? What is a relational model? What is an instance of a relational schema? What is a key? What is a superkey? What is the difference between a key and a superkey? Please also refer to practice homework 1.
2. How do you write a SQL command to create a table? Declare primary keys, declare foreign keys? Please also refer to Practice homework 2.
3. How do you write SQL queries to retrieve information from a table, or from multiple tables? For basic select-from-where queries, how do you convert your SQL queries into relational algebra? Please also refer to practice homework 3.
4. How do you write SQL queries to compute aggregates (with group by clauses, having clauses)? Please also refer to practice homework 4.
5. Relational algebra. Practice writing various relational algebra queries by reviewing practice homework 5.
6. What properties do transactions have? What are basic notions of transactions?