Due: Wed. Sep. 23, 2009

Hands-on assignment

You will create a few relations in a database, insert a few tuples in each relation, and write and execute some SQL queries.

Use SQL for all tasks: Table creation, inserting data, and querying. Put all commands and queries in one or more ASCII files, instead of typing them into DB systems.

Create the following tables:

STUDENTS = {id, name, dept}
COURSES = {cNo, title, credits}
TRANSCRIPTS = {id, cNo, grade}

Use appropriate types for the attributes. Declare appropriate keys for each table. Declare referential integrity (foreign key constraints) as appropriate.

Insert a few tuples into each table.

Write and execute the following SQL queries:

Q1. List all students (ids and names) in “Computer Science” department.
Q2. List all courses (cNos and titles) “F. Flintstone” has taken, and passed with a grade of “A”.
Q3. List students in “Computer Science” department, and for each student list the total credit-hours the student has taken (hence, the output table has three columns: id, name, total_credits).

Output: Print all SQL statements for table creation and data insertion. Print your tables. Print the queries, and for each query, print the result.