Hands-on assignment - Part (a)

Use MySQL (or Microsoft SQL Server, or Oracle) for this assignment. You will create a few relations in a database, insert a few tuples into 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 text files, instead of typing them directly 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 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) “Stilgar” 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 for Part (a): Print all SQL statements for table creation and data insertion. Print your tables. Print your queries, and for each query, print the result.

Part (b)

Develop a simple web interface to the database you implemented in Part (a). The web page should list the queries Q1-Q3 (English statements - not SQL). When you click on a query (or on a button next to the query) the query should be executed and the result shown on a web page.

Helpful resources: W3 Schools
http://www.w3schools.com