

# ICS 132: Organizational Information Systems

## Assignment #3: Database Queries and Design

This assignment will be due at the lecture on 02/13/03.

At the URL <http://drzaius.ics.uci.edu:8080/examples/servlet/db>, you'll find a web page which allows you to enter SQL queries to access a database with details of books. The database consists of three tables, as follows:

**Table 1: BOOKS**

ISBN	Title	Pages	Price
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**Table 2: AUTHORS**

ISBN	Name
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**Table 3: TOPICS**

ISBN	Topic
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Note that some books may have multiple authors, or be about multiple topics.

Write SQL queries to answer the following questions. (You should provide both the query and the result. The easiest way to do this is to print out the results page, which lists the query too.)

1. Which books cost over \$100?
2. Which is the most popular topic and how many books are written about it?
3. Which authors have written books about cognitive science?
4. How many authors have written about each topic?
5. What are the average prices of books on each topic?
6. Who has written about the most topics?
7. Which book has the best value, for number of pages?

Notes:

- ¥ there's one thing I didn't mention in the lecture that you'll need to complete this. There's a LIMIT directive to the SELECT command which limits the number of results you get back to a set number. So, `SELECT attrib1, attrib2 FROM table1, table2 WHERE attribute=value LIMIT 5` will only return the first five results.)
- ¥ the DBMS that is being used here is PostgreSQL. There's a reference manual available through <http://www.postgresql.org> (select users lounge from the bar at the top.)