ICS 132: Organizational Information Systems

Assignment #2: Database Queries and Design
This assignment will be due at the lecture on 02/03/04.

At the URL http://drzaius.ics.uci.edu/ics132/index.php, 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

<table>
<thead>
<tr>
<th>ISBN</th>
<th>Title</th>
<th>Pages</th>
<th>Price</th>
</tr>
</thead>
</table>

Table 2: AUTHORS

<table>
<thead>
<tr>
<th>ISBN</th>
<th>Name</th>
</tr>
</thead>
</table>

Table 3: TOPICS

<table>
<thead>
<tr>
<th>ISBN</th>
<th>Topic</th>
</tr>
</thead>
</table>

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? (Your query should show only a single result.)
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. Which book has the best value, for number of pages?

Notes:

The DBMS that is being used here is PostgresQL. There’s a reference manual available through http://www.postgresql.org (select docs from the bar at the top, below the logo.)