

Part 1 - A MySQL Table

Each of you has a database for your own use on cscilab.bc.edu, and an account and password emailed to you.

Use PHPMyAdmin to perform the following steps with your database:

Create a table in your database called *mylist*. Create fields as shown below, and enter the following people. Choose appropriate types for each field (Birthday should NOT be text or varchar).

LastName	FirstName	Website	Birthday
Brown	Chuck	www.windmeupchuck.com	8/28/1936
Brock	Lee	www.broccoli.com	1/1/1
Ma	Yo-yo	www.yo-yoma.com	10/7/1955
Streep	Meryl	www.simplystreep.com	6/22/1949

Add someone to the celebrity book.

Delete Brock Lee from the celebrity book.

Create a query that shows only the names and birthdays, sorted by name. Cut and paste your SQL query into a document for Canvas submission.

When you are finished, leave your database as it exists at the end of step 4. We'll be looking at the database itself when checking this assignment.

Part 2 - World Fact Book Queries

Create a text document using your favorite text editor, and put your name in it. For each question below, tell me the **answer** to the question **AND give me the SQL queries** you used to find the information. Use copy and paste to copy your queries into the text document. When you're finished, submit your text document to Blackboard Vista.

1. Write a query to find all information about Monaco. Just turn in the query, you don't have to turn in the information.
2. In how many countries is Arabic or an Arabic dialect spoken as one of the national languages? Direct phpMyAdmin to show 1000 rows starting from record 0. Then, near the top in yellow, there will be a count of the number of records found. [Hint: there are more than 25. If you're not finding them all, look in the text for "wild cards", at w3schools or in your text book]
3. Create a list of continents followed by the number of airports that continent has.
4. How much more electricity was produced than consumed in 2007? Show the answer in KWh.
5. What are the *five* countries with the largest trade deficit? Show only these five.
6. Regarding question 7: which are the *next three* countries with in order of largest trade deficit? Show only those three.
7. What is the maximum median age for all the countries in the world factbook?
8. The population, 25 years from now, of each country can be estimated as follows: $P(1+G)^{25}$ where P is the current population, and G is the population growth rate. Which country should have the largest population in 25 years? (Hint: the answer is not China.) (Another hint: note that the growth rate field in the database has units of *percent*, so you'll need to

divide it by 100 to get the actual rate.) (Yet another hint: the `pow()` function works in SQL, like it does in php.)

9. How much oil remained in the world in 2007? Your query should add up the oil reserves field, returning just that one number.
10. How many years remain until the world runs out of oil at the present consumption rate? This can be done as a single query. Note that the data in the table starts at 2007. Adjust the years to be the number of years from the current year. Your query should give the correct number of years based on 2007 data no matter what year (2014 or later) it is executed. (Hint: you'll probably be alive, I probably won't.)