

Data Centric RAD

Lab 2 MySQL Review II

Part 1

- Get superheroes_wk2.sql from Moodle.
- Import it into MySQL as follows using same procedure as in Lab 1.
- use superheroes;
- Insert the following information into the superhero_table:
name = Penguin
City = Gotham City
Real First Name = Danny
Real Surname = DeVitto
dob = January 14th 1955
powers = 44.57
 - `INSERT INTO superhero_table VALUES`
 - `('Penguin', 'Gotham City', 'Danny', 'DeVito', '1955-01-14', 44.57);`
- Insert the following information into the superhero_table:
name = Joker
city = New York
powers = 77.10
 - `INSERT INTO superhero_table (`name`, `city`, `powers`)
VALUES('Joker', 'New York', 77.10);`
- Update the superhero_table so that everywhere a first name or surname is NULL, it is now UNKNOWN instead.
HINT: When checking for NULL, you can't say = NULL, you should say is NULL.
 - `UPDATE superhero_table SET real_first_name = 'UNKNOWN',
real_surname = 'UNKNOWN' WHERE real_first_name IS NULL
AND real_surname IS NULL;`

- Display the number of superheroes, whose birthdays are known, as 'Number of known Birthdays'.
 - `SELECT COUNT(s.dob) as `Number of Known Birthdays` FROM superhero_table s`
- Change the birthday of Spiderman from Metropolis to January 28th 1980.
 - `UPDATE superhero_table s SET s.dob = '1980-01-28' WHERE name = 'Spiderman' AND city = 'Metropolis'`
- Increase the powers by 1 for each 'Bat' related superhero in Gotham City.
 - `UPDATE superhero_table s SET s.powers = powers+ 1 WHERE name = 'Bat%' AND city = 'Gotham City'`
- Delete all superheroes whose *dob* is NULL.
HINT: When checking for NULL, you can't say `= NULL`, you should say `is NULL`.
 - `DELETE FROM superhero_table WHERE dob IS NULL`
- Delete all superheroes whose real first name is *Bruce*, and who live in *Metropolis* and who were born in *January*.
 - `DELETE FROM superhero_table WHERE MONTH(dob) = 01 AND real_first_name = 'Bruce' AND city = 'Metropolis'`
- Increase the powers of all superheroes who were born in *November* by 1.
 - `UPDATE superhero_table SET powers = powers + 1 WHERE MONTH(dob) = 11`
- Display the name, real first name, real surname and dob (as *Oldest DOB*) of the *oldest* superhero.
 - `SELECT s.name, s.real_first_name, s.real_surname, MIN(s.dob) FROM superhero_table s`
- Display the total powers (as *Total Metropolis Powers*) of all superheroes in *Metropolis*.
 - `SELECT SUM(powers) as `Total Metropolis Power` FROM superhero_table WHERE city = 'Metropolis'`
- Display the city and the total powers (as *Total Powers*) of all superheroes in the city, for each city.
 - `SELECT city, SUM(powers) as `Total Powers` FROM superhero_table GROUP BY city`
- Display the superhero name, and the number of cities a superhero of that name lives in.

- `SELECT name, count(city) FROM superhero_table GROUP BY name`
- Display the year and the number of superheroes born in that year.
 - `SELECT YEAR(dob) as Year, count(name) as `No Of Superheroes` FROM superhero_table GROUP BY YEAR(dob)`
- Display the city and the total powers of all superheroes in that city, only for cities whose total superhero powers is greater than 100.
 - `SELECT city, SUM(powers) FROM superhero_table GROUP BY city HAVING SUM(powers) > 100`
- Show the minimum, maximum and average powers of the superheroes.
 - `SELECT MIN(powers), MAX(powers), AVG(powers) FROM superhero_table`
- Show the city and the average powers of all superheroes in that city; for all cities.
 - `SELECT city, AVG(powers) FROM superhero_table GROUP BY city`