# 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