Homework 3

Due February 3, 2023

Preparation:

I created a python script to generate a fake "employees" database called **myEmployee** with only two tables. In order to install and manipulate it, please follow the following steps, which presume that you already installed Python3 and MySQL.

- 1. Unzip and place the resulting directory in a known location on your computer.
- 2. Change the database information at the beginning of creator.py.
- 3. Start the MySQL server.
- 4. Run creator.py.
- 5. Check that MySQL Workbench shows the new database.

To make answers compatible, I am using a seed to the random generator.

The database simulates the employees and salaries of a small company over the last 30+ years. I tried to make the names more typical by using lists of frequent first and last names, which of course means that names of actual persons might show up.

Queries

For each of the following questions, provide a SQL query and an answer.

- 1. Find the first and last name of the employee with number 100001.
- 2. Find the first and last names of current employees (with last_date after NOW())
- 3. Find the number of current employees. (Look up how COUNT works.)
- 4. Find the names of original employees (with hire day 2001-9-3). You make a date with the date() function used on a string with format yyyy-mm-dd.
- 5. Find the number of employees on June 1, 2001.
- 6. Find the number of former and current employees with Uruguayan citizenship.
- 7. Find the number of current employees with Uruguayan citizenship.
- 8. Find all citizenships of employees (Hint: Use SELECT DISTINCT)
- 9. Find the maximum salary of a person that is a citizen of India.
- 10. Find the details of the person with the highest salary that is a citizen of Uruguay.

For each query, give the SELECT statement and the result. You can limit yourself to the first ten results.