San José State University Department of Applied Data Science

DATA 201 Database Technologies for Data Analytics

Spring 2025 Section 21 Instructor: Ron Mak

Assignment #1

Assigned: Thursday, January 23

Due: Thursday, January 30 at 5:30 pm

Individual assignment, 100 points max

Software installations

The purpose of this assignment is to make sure that every student has properly installed the initial set of required software:

- Python and Jupyter notebook
- MySQL database management system (DBMS)
- MySQL Workbench
- MySQL Connector/Python

Refer to the lecture notes for instructions on installing the software for creating and loading the **school** database using MySQL Workbench and file **school.sql**.

Run the Python program

Run the standalone Python program Assignment1.py in a terminal window:

ipython Assignment1.py

Run the Jupyter notebook

Run Assignment1.ipynb in a notebook:

- 1. In a terminal window, cd to the directory or folder containing Assignment1.ipynb.
- 2. Enter the command jupyter lab
- 3. Jupyter lab will start in a browser.
- 4. Double-click on Assignment1.ipynb in the left panel to display the notebook.
- 5. From the Run menu, select Run All Cells.
- 6. Output should appear in cells.
- 7. From the File menu, select Save Notebook.

What to submit

Submit the following screenshots from your computer:

- A screenshot of **MySQL Workbench** that shows
 - o the **school** schema listed among the schemas
 - an SQL query (make up one or copy one from the "Introduction to SQL Queries" website)
 - o the results of the query
- A screenshot or text file from executing the standalone Python program Assignment1.py in a terminal window.
- The notebook Assignment1.ipynb including the output cells.

Rubric

Criteria		Max points
•	MySQL Workbench screenshots	• 60
	o the school schema listed among the schemas	o 20
	o an SQL query	o 20
	 the results of the query 	o 20
•	Screenshot or text file from executing Assignment1.py in a	• 20
	terminal window.	
•	The notebook Assignment1.ipynb including the output cells	• 20