

# DATA 225

## Database Systems for Analytics

Fall 2023  
Section 21  
Instructor: Ron Mak

### Assignment #1

Assigned: Monday, August 21  
Due: Monday, August 28 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
  - the **school** schema listed among the schemas
  - an SQL query (make up one or copy one from the “Introduction to SQL Queries” website)
  - 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
<ul style="list-style-type: none"><li>• MySQL Workbench screenshots<ul style="list-style-type: none"><li>○ the school schema listed among the schemas</li><li>○ an SQL query</li><li>○ the results of the query</li></ul></li></ul>	<ul style="list-style-type: none"><li>• 60<ul style="list-style-type: none"><li>○ 20</li><li>○ 20</li><li>○ 20</li></ul></li></ul>
<ul style="list-style-type: none"><li>• Screenshot or text file from executing <b>Assignment1.py</b> in a terminal window.</li></ul>	<ul style="list-style-type: none"><li>• 20</li></ul>
<ul style="list-style-type: none"><li>• The notebook <b>Assignment1.ipynb</b> including the output cells</li></ul>	<ul style="list-style-type: none"><li>• 20</li></ul>