CS 327E Project 1, due Thursday, 09/09.

1. Open a terminal window in JupyterLab and download the sakila dataset from Google Cloud Storage. Run the following commands to download and extract the dataset:
   ```
   gsutil cp gs://cs327e-open-access/sakila.zip .
   unzip sakila.zip
   ```

   Open the sakila folder and look at the three files in this folder: `sakila-database.sql`, `sakila-data.sql`, and `sakila-diagram.png`. If there is a data type in the create table statements which you don't recognize, look it up in the MySQL documentation.

2. Create a new Python Jupyter notebook and name it `project1.ipynb`. Implement the following logic in your Jupyter notebook:

   - Create the sakila database and database objects by running `sakila-database.sql`.
   - Populate the tables by running `sakila-data.sql`.
   - Get a row count for each table in the database.
   - Write a query to sample a few records from each table using the LIMIT clause.
   - Write one query on any table that uses both a WHERE clause and ORDER BY clause. Add a short comment above your SQL statement to describe the query.
   - Write an INSERT statement to add a record into any one of the tables. Add a short comment above your SQL statement to describe the SQL.
   - Write an UPDATE statement to update one or more records from any one of the tables. Add a short comment above your SQL statement to describe the SQL.
   - Write a DELETE statement to delete one or more records from any one of the tables. Add a short comment above your SQL statement to describe the SQL.

CS 327E Project 1 Rubric
Due Date: 09/09/21

Download and extract the sakila dataset to your jupyter notebook instance. **-5** no dataset or incorrect dataset found in Jupyter instance	5
Create a new Python Jupyter notebook named `project1.ipynb`. **-5** incorrect file name	5
Create the database based on `sakila-database.sql`. Populate the tables from the `sakila-data.sql` file. **-30** missing sakila database **-7** for each missing table or incorrect data load	30
Run a row count of each table in the database. **-3** each missing row count	15
Run a query that samples the data from each table using the `LIMIT` clause. **-3** for each missing query	15
Run a query that includes a `WHERE` clause and `ORDER BY` clause. Include a short comment above your query to explain its function. **-5** missing WHERE clause **-5** missing ORDER BY clause **-2** missing comment or comment is not descriptive	10
Run other CRUD operations: ● An INSERT statement into a table. ● An UPDATE statement on a table ● A DELETE statement on a table ● A short comment above each statement to explain their function. **-5** each incorrect statement **-2** for each missing comment or comment is not descriptive	20
`project1.ipynb` pushed to your group's private repo on GitHub. Your project **will not** be graded without this submission.	**Required**

`submission.json` submitted into Canvas. Your project **will not** be graded without this submission. The file should have the following schema:
 	
`{`
`  "commit-id": "your most recent commit ID from GitHub",`
`  "project-id": "your project ID from GCP"`
`}`
 	
Example:
	Required

{
"commit-id": "dab96492ac7d906368ac9c7a17cb0dbd670923d9",
"project-id": "some-project-id"
}	

Total Credit:	**100**