The following is an <a href="MDB movie dataset">IMDB movie dataset</a> available via Kaggle https://www.kaggle.com/carolzhangdc/imdb-5000-movie-dataset/data

The column names in this dataset should be more or less self-descriptive. Some of the key columns that pertain to this mini-project are: 'actor\_1\_name', 'actor\_2\_name', 'actor\_3\_name', 'director\_name', 'budget' and 'gross'. You can make assumptions about these names as you see fit in case they do not seem descriptive enough.

The task requires the following (Note: please use any libraries that you see fit, if applicable, for the following steps):

- 1. Import the file into a local db
- 2. Then write functions in Python to perform the following:
  - a. Load the relevant data from the db in Step 1 into your program:
  - b. For this data, compute the top 10 genres in decreasing order by their profitability.

    Note: You could (but are not required to) compute profitability as simply as:
    - i. 'gross' 'budget' or
    - ii. ('gross' 'budget')/'budget'
    - iii. Anything advanced that you can think of
  - c. Return the top 10 actors or directors in decreasing order by their profitability (use any definition you choose for profitability using the above guidance).
  - d. Bonus questions (Note: If you choose to do any of the bonus questions below, any one question is more than adequate):
    - i. Choice 1: Find the best actor, director pairs (up to 10) that have the highest IMDB\_ratings, if there are indeed any such pairs.
    - ii. Choice 2: Any interesting questions that you would like to work on if you would (for e.g. imdb\_score, actor facebook\_likes
    - iii. Choice 3: Build a REST API to return an actor's information (simple text output)
- 3. Write unit tests for your functions. **Note: This is an important step for this project.**
- 4. Commit code to a git repo (gitlab or github) and send us a link to it.
- 5. Also document your steps, libraries used and any instructions.

Note: Please feel free to make assumptions as you see fit. If you are unable to finish the mini-project for any reason (for instance if there were time constraints or personal reasons why), please document the methodology you would take.