ETL challenge.

The next challenge requires the development of a Django web application that manages a collection of movies extracted from IMDB that will be loaded into a Postgres database and that also exposes a series of endpoints that comply with the API-Rest scheme. Use **Python** 3 and **venv** for the implementation of this challenge.

Download the necessary movies file

- **1.** Generate a relational model using the entities you are able to identify when decomposing the movie file. write the basic unit tests using Pytest
- 2. Develop a new <u>Django custom command</u> that allows transforming the content of the movies file to a JSON format so that the initial loading of the database is done through <u>fixtures</u>. At this point the performance is important, show by console the time it takes the command to do its work.
- **3.** Using the Django' Admin, register the models you consider in order to generate a dashboard that is close enough to the structure of the movies file.
- **4.** In the admin, generate the necessary custom filters for these in ability to show the result of the following questions:
 - Which are the 10 movies that raised the most money?
 - What are the 10 films that raised the least money?
 - Which are the 7 films that spent the most money to produce?
 - What are the 7 films that spent the least money to produce?
 - Which movie genre raised the most money for each year?
 - Which genre do people like best?
 - Which 5 directors have the best reputation?

At least 5 of the above filters must be implemented, an additional score is given if all are implemented.

- 5. Expose through an API-Rest the necessary endpoints that allow:
 - Return all movies in which an actor has participated
 - Return all films directed by a director, sorted by year of publication
 - Return to the movies grouped by gender and order by major collection

The above endpoints are read-only.

6. Using **Angular** in its last version, design a very simple web page where it shows the results exposed by the previous APIs. be ingenious!

Extra bonus points: Docker-ize the solution, so that I can run the code and tests without any assumption of my local setup (including running a postgres instance in docker-compose)

You don't need to go through all of the steps, but there should be instructions on how I can run the code. I mainly want to see how you approach a problem and your coding style. There are multiple steps so you have the option to show me different skills. It's up to you.