Project Description

As a data scientist, you have been hired by a rookie movie producer to help him decide what type of movies to produce and which actors to cast. Your task is to analyze the data he has provided, which includes information on 3,000 movies, and use your findings to make recommendations.

To do this, you will first need to explore and clean the data to ensure that it is accurate and complete. This may involve checking for missing values, duplicate data, and outliers.

Once the data is clean, you can start to identify trends and patterns. For example, you could look at the most profitable movies, the most popular genres, and the actors who have starred in the most successful films.

You could also use the data to create predictive models. For example, you could develop a model that can predict the profitability of a movie based on its genre, budget, and cast.

Once you have a good understanding of the data, you can start to make recommendations to the movie producer. For example, you could recommend that he produce movies in certain genres or that he cast certain actors.

You could also provide him with more specific recommendations, such as suggesting that he produce a remake of a successful film or that he create a new franchise based on a popular book series.

Ultimately, the goal of your analysis is to help the movie producer make informed decisions about his business. By providing him with valuable insights and recommendations, you can help him to increase his chances of success.

Further, you have to answer the following questions:

1. Which movie made the highest profit? Who were its producer and director? Identify the actors in that film.
2. This data has information about movies made in different languages. Which language has the highest average ROI (return on investment)?
3. Find out the unique genres of movies in this dataset.
4. Make a table of all the producers and directors of each movie. Find the top 3 producers who have produced movies with the highest average RoI?
5. Which actor has acted in the most number of movies? Deep dive into the movies, genres and profits corresponding to this actor.
6. Top 3 directors prefer which actors the most?