

Project Title: Movie Ratings Analysis

Objective:

Analyze a movie ratings dataset to extract insights using Python, NumPy, and Pandas. This project focuses on data manipulation, filtering, and basic analysis.

Dataset:

Use a small movie ratings dataset (e.g., [IMDB Dataset] (<https://www.kaggle.com/lakshmi25npathi/imdb-dataset-of-50k-movie-reviews>) or a sample dataset like [MovieLens](<https://www.kaggle.com/rounakbanik/movie-lens-dataset>)).

Project Tasks:

1. Basic Python and NumPy

- **Task 1.1:** Load the dataset and explore it using basic Python and NumPy.
 - Calculate basic statistics (mean, median, standard deviation) for ratings.
 - Use NumPy arrays for numerical computations.
- **Task 1.2:** Filter the dataset to find:
 - Movies with ratings above a certain threshold (e.g., 4 stars).
 - Movies from a specific year or genre.

2. Pandas for Data Handling

- **Task 2.1:** Use Pandas to:
 - Read and manipulate the dataset.
 - Handle missing data (if any).
 - Sort and filter movies based on ratings or genres.
- **Task 2.2:** Group movies by genre or year and calculate average ratings for each group.