

## Dataset details

You will be using the ml-m1 dataset from the MovieLense website.

Dataset: <https://grouplens.org/datasets/movielens/1m/>

You will be using movies.dat and rating.dat for building your recommender.

### Steps:

1. Create  $m \times u$  matrix with movies as row and users as column - 10 points
2. Normalize the matrix - 2 points
3. Compute SVD to get U, S, and V. - 4 points

Use `np.linalg.svd()`

4. From your V.T select 50 components - 4 points
5. Implement a function that takes movieID as input and then implement cosine similarity along with sorting to recommend the top 10 movies. - 10 points