What is implemented in the codes is a user-movie collaborative filtering method and recommends to users with highest ratings movies to address cold start problems. Collaborative filtering method can be less effective if the data is sparse, meaning there are not enough ratings or interactions for some users or items, which is observed in rating datasets.

Another method is content based movie recommendation

It suggests movies to users based on what the user has watched in the history and find other movies like what users have engaged. These features can include genres, directors, actors, plot descriptions, and more.

One approach is two-tower neural networks.

This approach uses two separate neural networks (towers) – one for users and one for items. These networks process user and item features independently, and their outputs are combined to predict the user-item interaction. It can capture complex, non-linear relationships between user and item features. It can take various types of features (like text, images, etc.), not just user-item interactions.But requires more computational resources and is generally slower to train than matrix factorization. It can have overfitting risk and less interpretability