# **Movie rating Recommendation system**

# **Business Understanding**

In the modern entertainment industry, consumers are overwhelmed by vast libraries of movies across streaming platforms, theaters, and rental services. With thousands of titles available, finding relevant and engaging content can be challenging.

The goal is to provide movie recommendations to users based on their past ratings, improvin user engagement and satisfactions. Additionally, I will aim to address the cold start problem to recommend movies for new users or movies with limited data.

# **Data Understanding**

The MovieLens dataset is used, which contains 100K,836 explicit user ratings for movies along with metdata such as 9,743 titles, genres, and timestamps. Users were selected at random for inclusion. This dataset allows us to analyze user preferences and create a recommendation system. This dataset is particularly suitable for this project because:

- It contains explicit user feedback in the form of ratings, making it ideal for collaborative filtering approaches.
- It provides metadata about movies (e.g., genres, titles, release years), enabling the potential inclusion of content-based and hybrid recommendation techniques.
- It has been extensively used in academic and industry research, ensuring reliability and well-documented best practices.

In this project, we have 3 seperate datasets that can be included

- links.csv: Identifiers that can be used to link to other sources of movie data are contained in the file.
- movies.csv: Provides metadata such as movie titles and genres.
- ratings.csv: Contains user-movie interactions with explicit ratings.

While the dataset is highly useful, several limitations must be considered:

- Sparsity: The dataset contains a high number of missing ratings, making it challenging to infer preferences
  for less active users. Techniques such as matrix factorization and nearest-neighbor models can mitigate this
  issue.
- Cold Start Problem:
- New users: Without sufficient rating history, it is difficult to provide personalized recommendations. Hybrid models incorporating content-based methods can help.
- New movies: Unrated movies struggle to be recommended until they accumulate sufficient feedback.
- **Bias in Ratings:** Some movies receive significantly more ratings than others, potentially skewing recommendations. Users may have varying rating scales (e.g., some users rarely give 5-star ratings). Normalization techniques can address this.

# **Data Preparartion**

I'll start by inspecting the contents of these files to understand their structure and proceed with building the movie recommendation system.

I'll import the necessary libraries for this project, which includes the Surprise library.

In [1]:

```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
%matplotlib inline

#import neccessary libraries from the surprise library
from surprise import SVD, Dataset, Reader
from surprise.model_selection import train_test_split
from surprise import accuracy
from surprise.model_selection import cross_validate, GridSearchCV
from surprise.prediction_algorithms import KNNBaseline, KNNBasic, KNNWithMeans
from sklearn.feature_extraction.text import TfidfVectorizer
from sklearn.metrics.pairwise import cosine_similarity
from sklearn.metrics import mean_squared_error
In [2]:
```

```
# save each CSV file into variables.
links_df = pd.read_csv('../data/links.csv')
movies_df = pd.read_csv('../data/movies.csv')
ratings_df = pd.read_csv('../data/ratings.csv')
```

## In [3]:

```
# print the head of each dataset

links_df_head = links_df.head()
movies_df_head = movies_df.head()
ratings_df_head = ratings_df.head()

links_df_head, movies_df_head, ratings_df_head
```

## Out[3]:

```
movieId imdbId
                    tmdbId
(
         1 114709
                     862.0
0
         2 113497
                     8844.0
1
         3 113228 15602.0
2
         4 114885
3
                    31357.0
4
         5
            113041 11862.0,
   movieId
                                          title
0
         1
                               Toy Story (1995)
1
         2
                                Jumanji (1995)
2
         3
                       Grumpier Old Men (1995)
3
         4
                      Waiting to Exhale (1995)
4
         5 Father of the Bride Part II (1995)
   Adventure | Animation | Children | Comedy | Fantasy
1
                    Adventure | Children | Fantasy
2
                                 Comedy | Romance
3
                           Comedy|Drama|Romance
4
                                         Comedy ,
   userId movieId rating timestamp
                      4.0 964982703
0
       1
               1
                       4.0 964981247
1
                 3
        1
2
                       4.0 964982224
        1
                 6
3
        1
                 47
                       5.0
                            964983815
        1
                50
                       5.0 964982931)
```

#### Here is the structure of the three datasets:

```
1. Links Dataset (links.csv):
    * movieId: A unique identifier for each movie (linked to the movies.csv datase
t).
    * imdbId: The IMDb ID for the movie.
    * tmdbId: The TMDb ID for the movie.
```

2. Movies Dataset (movies.csv):

```
* movieId: A unique identifier for each movie (linked to the ratings.csv and l
inks.csv datasets).
  * title: The title of the movie, including the release year.
  * genres: The genres associated with the movie (separated by "|").

3.Ratings Dataset (ratings.csv):
  * userId: A unique identifier for each user.
  * movieId: A unique identifier for the movie (linked to the movies.csv dataset).
  * rating: The rating given by the user (on a scale, e.g., 1 to 5).
  * timestamp: The timestamp of when the rating was given.
```

# **EDA**

#### I'll focus on the following for EDA:

- 1. Missing Values: Check for null or missing values in each dataset.
- 2. Distribution of Ratings: Analyze the distribution of ratings to understand user behavior.
- 3. Movie Statistics: Identify the most-rated and least-rated movies.
- 4. User Statistics: Understand user activity (e.g., number of movies rated per use r).
- 5. Genre Analysis: Explore the genres of movies to see the diversity in the dataset .

#### In [4]:

```
# Check for missing values in each dataset
missing_links = links_df.isnull().sum()
missing_movies = movies_df.isnull().sum()
missing_ratings = ratings_df.isnull().sum()
missing_links, missing_movies, missing_ratings
```

## Out[4]:

```
(movieId 0
imdbId 0
tmdbId
         8
dtype: int64,
movieId 0
title
genres
dtype: int64,
userId
          0
movieId
          0
rating
timestamp
dtype: int64)
```

#### We see the missing values in the following

T - - 1-- D-+---+

```
tmdbId: 8 missing values.
```

We can drop these values since it's a small portion of missing values throughout the data

```
In [5]:
```

```
links_df.dropna(subset=['tmdbId'], inplace=True)
```

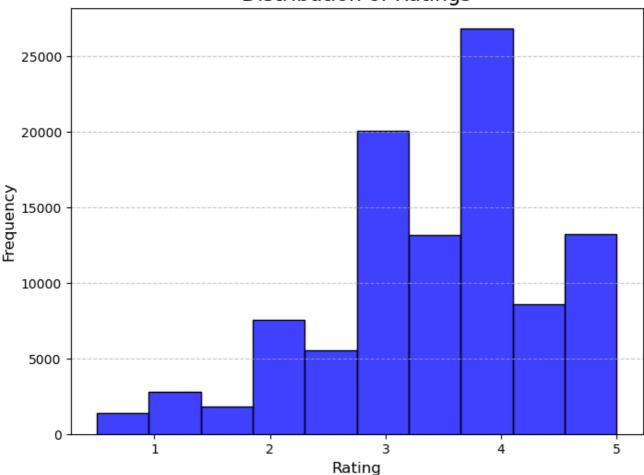
# **Visualizations**

I'll start with a visualization of the ratings and the amount of ratings recorded.

```
In [6]:
```

```
# Plot the distribution of ratings
plt.figure(figsize=(8, 6))
sns.histplot(ratings_df['rating'], bins=10, kde=False, color='blue')
plt.title('Distribution of Ratings', fontsize=16)
plt.xlabel('Rating', fontsize=12)
plt.ylabel('Frequency', fontsize=12)
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.savefig('./images/Distribution_of_ratings.png')
plt.show()
```





The distribution of ratings shows clear peaks at rounded values (e.g., 3.0, 4.0, 5.0), suggesting users prefer whole-number ratings. The majority of ratings seem to lean towards higher values, indicating that users may tend to rate movies positively.

Next, we'll identify the most and least rated movies.

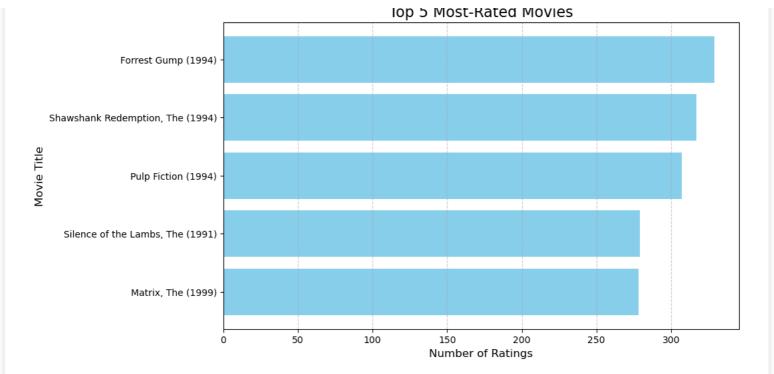
```
In [7]:
```

```
# Movie statistics: Number of ratings per movie
movie_rating_counts = ratings_df['movieId'].value_counts()
```

```
most_rated_movies = movie_rating_counts.head(5)
least_rated_movies = movie_rating_counts.tail(5)
# Merge with movies df to get movie titles for the most/least-rated movies
most rated movies df = movies df[movies df['movieId'].isin(most rated movies.index)]
most rated movies df = most rated movies df.set index('movieId').loc[most rated movies.in
most rated movies df['rating count'] = most rated movies.values
#Least-rated movies
least rated movies df = movies df[movies df['movieId'].isin(least rated movies.index)]
least rated movies df = least rated movies df.set index('movieId').loc[least rated movies
least rated movies df['rating count'] = least rated movies.values
print('Most Rated Movies:')
print(most rated movies df)
print('\n Least Rated Movies:')
print(least_rated_movies_df)
Most Rated Movies:
                                     title
                                                                  genres \
movieId
356
                      Forrest Gump (1994)
                                               Comedy | Drama | Romance | War
         Shawshank Redemption, The (1994)
318
                                                            Crime | Drama
296
                      Pulp Fiction (1994) Comedy|Crime|Drama|Thriller
                                                 Crime|Horror|Thriller
593
         Silence of the Lambs, The (1991)
2571
                       Matrix, The (1999)
                                                 Action|Sci-Fi|Thriller
         rating_count
movieId
356
                  329
318
                  317
296
                  307
593
                  279
2571
                  278
Least Rated Movies:
                                                title
                                                                genres \
movieId
86279
                                Into Eternity (2010)
                                                          Documentary
86922
         Nothing to Declare (Rien à déclarer) (2010)
                                                               Comedy
5962
                             Body of Evidence (1993) Drama|Thriller
87660
                              Too Big to Fail (2011)
                                                                Drama
163981
                                            31 (2016)
                                                               Horror
         rating count
movieId
86279
                    1
86922
                    1
5962
                    1
87660
                    1
163981
Let's visualize the Top 5 Most rated Movies
```

```
In [8]:
```

```
# Plot most-rated movies
plt.figure(figsize=(10, 6))
plt.barh(most rated movies df['title'], most rated movies df['rating count'], color='skyb
plt.title('Top 5 Most-Rated Movies', fontsize=16)
plt.xlabel('Number of Ratings', fontsize=12)
plt.ylabel('Movie Title', fontsize=12)
plt.gca().invert_yaxis() # Invert y-axis to have the most-rated movie on top
plt.grid(axis='x', linestyle='--', alpha=0.7)
plt.savefig('./images/Top_5_most_rated_movies.png')
plt.show()
```

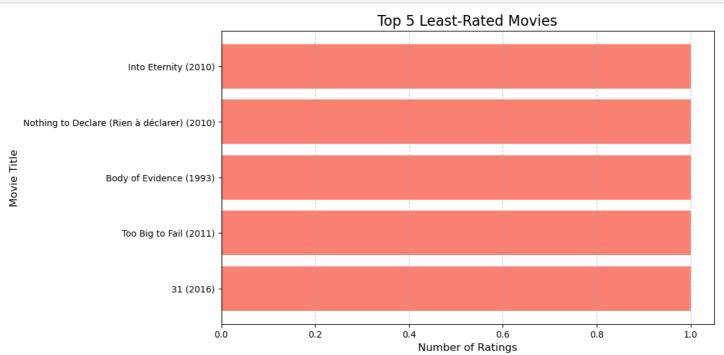


We can see that the top reported rated movie was Forrest Gump, followed by Shawshank Redemption, Pulp Fiction, Silence of the Lambs, and Matrix. This will help identify user preferences and which movies are most widely rated.

#### Let's do the same with the 5 least rated movies

#### In [9]:

```
# Plot least-rated movies
plt.figure(figsize=(10, 6))
plt.barh(least_rated_movies_df['title'], least_rated_movies_df['rating_count'], color='sa
lmon')
plt.title('Top 5 Least-Rated Movies', fontsize=16)
plt.xlabel('Number of Ratings', fontsize=12)
plt.ylabel('Movie Title', fontsize=12)
plt.gca().invert_yaxis() # Invert y-axis to have the least-rated movie on top
plt.grid(axis='x', linestyle='--', alpha=0.7)
plt.savefig('./images/Top_5_least_rated_movies.png')
plt.show()
```

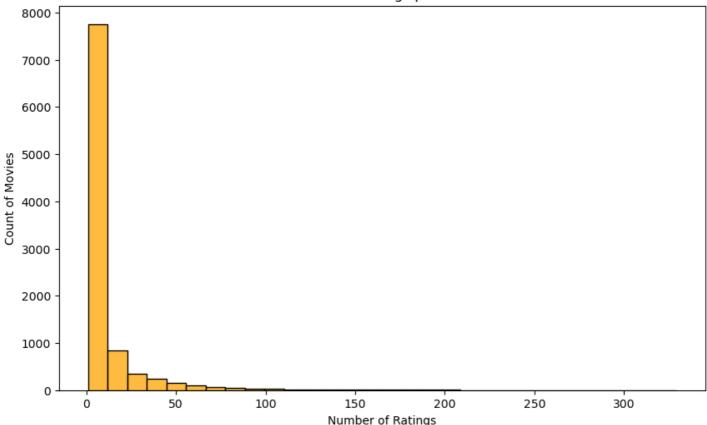


Popular movies (those rated by many users) tend to be older or critically acclaimed. Most movies have very few ratings, making recommendations challenging for niche movies.

#### In [10]:

```
movie_ratings_count = ratings_df.groupby('movieId')['rating'].count()
plt.figure(figsize=(10, 6))
sns.histplot(movie_ratings_count, bins=30, kde=False, color='orange')
plt.title('Number of Ratings per Movie')
plt.xlabel('Number of Ratings')
plt.ylabel('Count of Movies')
plt.show()
```





# **Genre Distribution**

Movies are grouped by genres to understand the dominant categories. Popular genres include Drama, Comedy, and Action.

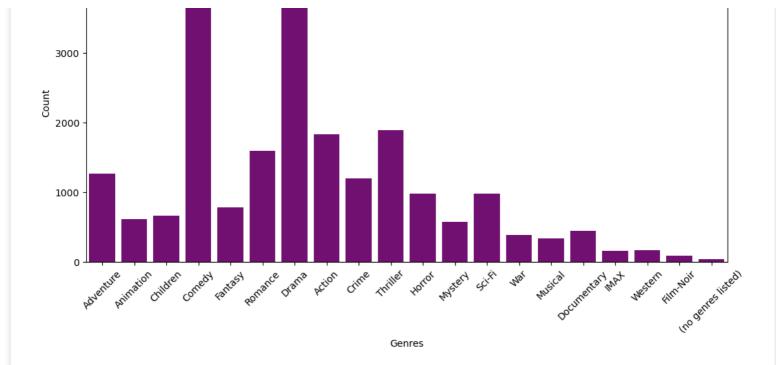
Movies often belong to multiple genres.

#### In [11]:

```
from collections import Counter
genre_list = movies_df['genres'].str.split('|').explode()
genre_counts = Counter(genre_list)

plt.figure(figsize=(12, 6))
sns.barplot(x=list(genre_counts.keys()), y=list(genre_counts.values()), color='purple')
plt.title('Genre Distribution')
plt.xlabel('Genres')
plt.ylabel('Count')
plt.xticks(rotation=45)
plt.savefig('./images/Genre_distribution.png')
plt.show()
```

#### Genre Distribution



Just like above, we can see the least rated recorded movies. This will provide insight into what movies users consider be least entertaining.

# **Explore User Statistics**

In [12]:

Next lets focus on the Most and Least active users based on how many ratings they have provided.

```
# Count the number of ratings per user
user_rating_counts = ratings_df['userId'].value_counts()

# Get the most active users
most_active_users = user_rating_counts.head()

# Get the least active users
least_active_users = user_rating_counts.tail()

#print results
print('Most Active Users:\n')
print(most_active_users)
```

```
print('\n Least Active Users:')
print(least rated movies df)
Most Active Users:
userId
      2698
414
599
      2478
474
      2108
448
      1864
       1346
Name: count, dtype: int64
Least Active Users:
                                                title
                                                                genres \
movieId
86279
                                 Into Eternity (2010)
                                                           Documentary
86922
         Nothing to Declare (Rien à déclarer) (2010)
                                                                Comedy
5962
                             Body of Evidence (1993)
                                                       Drama|Thriller
87660
                              Too Big to Fail (2011)
                                                                Drama
163981
                                            31 (2016)
                                                                Horror
         rating count
movieId
```

```
      86922
      1

      5962
      1

      87660
      1

      163981
      1
```

The most active users have rated a large number of movies, likely representing the highly engagaed users. Their ratings can provide valuable insights for collaborative filtering or building recommendation systems.

The least active users have contributed very few ratings, this may pose challenges for our recommendation systems due to the lack of data (the cold start problem)

Let's continue by creating a Collaborative Filtering-based Recommendation System.

I'll preprocess the data doing the following:

- Create a user-item matrix where rows represent users, columns represent movies, and cells contain ratings.
- Normalize ratings (optional, depending on the algorithm used).
- . Handle sparsity (e.g., fill missing values with 0 or leave as NaN, depending on the algorithm).

#### In [13]:

```
# create a user-item matrix
user item matrix = ratings df.pivot table(index='userId', columns='movieId', values='ra
ting')
# Display the matrix
print(user item matrix.head())
                                           5
                                                             7
movieId 1
                  2
                          3
                                   4
                                                                     8
userId
1
            4.0
                     NaN
                              4.0
                                      NaN
                                               NaN
                                                       4.0
                                                                NaN
                                                                        NaN
2
            NaN
                     NaN
                              NaN
                                      NaN
                                               NaN
                                                       NaN
                                                                NaN
                                                                        NaN
3
            NaN
                     NaN
                              NaN
                                      NaN
                                               NaN
                                                       NaN
                                                                NaN
                                                                        NaN
4
            NaN
                     NaN
                                      NaN
                                                       NaN
                                                                NaN
                                                                        NaN
                             NaN
                                               NaN
5
             4.0
                     NaN
                             NaN
                                      NaN
                                               NaN
                                                       NaN
                                                                NaN
                                                                        NaN
                               193565 193567 193571 193573 193579 193581
movieId 9
                 10
userId
                           . . .
1
            NaN
                     NaN
                                   NaN
                                           NaN
                                                    NaN
                                                            NaN
                                                                     NaN
                                                                              NaN
                          . . .
2
            NaN
                     NaN
                                   NaN
                                           NaN
                                                    NaN
                                                            NaN
                                                                     NaN
                                                                              NaN
                          . . .
3
            NaN
                     NaN
                                   NaN
                                           NaN
                                                    NaN
                                                            NaN
                                                                     NaN
                                                                              NaN
                           . . .
4
                                   NaN
                                           NaN
                                                    NaN
                                                            NaN
                                                                     NaN
                                                                              NaN
            NaN
                     NaN
                          . . .
5
                                                                     NaN
            NaN
                     NaN
                                   NaN
                                           NaN
                                                    NaN
                                                            NaN
                                                                              NaN
                          . . .
movieId 193583 193585 193587 193609
userId
1
            NaN
                     NaN
                              NaN
                                      NaN
2
            NaN
                     NaN
                             NaN
                                      NaN
3
            NaN
                     NaN
                             NaN
                                      NaN
4
                             NaN
                                      NaN
            NaN
                     NaN
5
            NaN
                     NaN
                             NaN
                                      NaN
```

The user-item generated matrix is sparse. Let's attempt to handle this sparsity and building the recommendation model.

Since the user-item matrix contains **NaN** value for unrated movies, let's factorize the user-item matrix to uncover latent features

#### In [14]:

[5 rows x 9724 columns]

```
# prepare the dataset for Surprise
reader = Reader(rating_scale=(0.5,5))
data = Dataset.load_from_df(ratings_df[['userId', 'movieId', 'rating']], reader)
# show the amount of users and items in the dataset.
```

```
dataset = data.build_full_trainset()
print(f'Number of users: {dataset.n_users} \n')
print(f'Number of items: {dataset.n_items}')

Number of users: 610
```

Number of items: 9724

# **Determine the best model**

Lets determine the best model for the dataset. We'll start with a baseline GridSearchCV below.

```
In [15]:
```

```
param_grid = {
    #latent factors
    'n_factors': [50,100,150],
    #number of iterations
    'n_epochs': [10,20,30],
    #learning rate
    'lr_all': [0.002,0.005,0.01],
    #regularization
    'reg_all': [0.02,0.1,0.2]
}
```

#### In [16]:

```
gs = GridSearchCV(SVD, param_grid, measures=['rmse', 'mae'], cv=5, n_jobs=-1)
gs.fit(data)
print(gs.best_score)
print(gs.best_params)
```

```
{'rmse': 0.8546994097820197, 'mae': 0.6556668851797411}
{'rmse': {'n_factors': 150, 'n_epochs': 30, 'lr_all': 0.01, 'reg_all': 0.1}, 'mae': {'n_factors': 150, 'n epochs': 30, 'lr all': 0.01, 'reg all': 0.1}}
```

#### **Cross Validation with KNNBasic**

```
In [17]:
```

```
knn_basic = KNNBasic(sim_options={'names': 'cosine', 'user_based': True})

cv_knn_basic = cross_validate(knn_basic, data, n_jobs=-1)

for i in cv_knn_basic.items():
    print(i)

print()
print(np.mean(cv_knn_basic['test_rmse']))

('test_rmse', array([0.94394484, 0.94463601, 0.95621946, 0.95027554, 0.94757312]))
```

```
('test_rmse', array([0.94394484, 0.94463601, 0.95621946, 0.95027554, 0.94757312]))
('test_mae', array([0.72180051, 0.72582941, 0.73271398, 0.72431223, 0.72735076]))
('fit_time', (0.15565752983093262, 0.11700725555419922, 0.12246465682983398, 0.1331083774
5666504, 0.1503736972808838))
('test_time', (1.0733582973480225, 1.15631103515625, 1.008117437362671, 1.046880006790161
1, 1.1059303283691406))
```

0.9485297952972885

This cross validation score indidcates the model is evaluated on unseen data, which adds credibility.

```
In [18]:
```

```
knn_basic_pearson = KNNBasic(sim_options={'name':'pearson', 'user_based': True})
cv_knn_basic_pearson = cross_validate(knn_basic_pearson, data, n_jobs=-1)
```

```
for i in cv_knn_basic_pearson.items():
    print(i)

print()
print(np.mean(cv_knn_basic_pearson['test_rmse']))

('test_rmse', array([0.97749589, 0.97607093, 0.97289199, 0.97244953, 0.96696339]))
('test_mae', array([0.75699175, 0.75396376, 0.75076731, 0.74713375, 0.74835971]))
('fit_time', (0.4231100082397461, 0.4465205669403076, 0.39020204544067383, 0.45895910263061523, 0.36295104026794434))
('test_time', (0.9922943115234375, 1.1005687713623047, 1.0628416538238525, 1.166011095046997, 1.0935604572296143))
```

```
We see an increase using pearson correlation, which indicates a veryh strong correlation between users in our
recommendations system. This is finding a strong linear similarity between users perference
Cross validation with KNNBaseline
In [19]:
knn baseline = KNNBaseline(sim options={'name': 'cosine', 'user based': True})
cv knn baseline = cross validate(knn baseline, data)
Estimating biases using als...
Computing the cosine similarity matrix...
Done computing similarity matrix.
Estimating biases using als...
Computing the cosine similarity matrix...
Done computing similarity matrix.
Estimating biases using als...
Computing the cosine similarity matrix...
Done computing similarity matrix.
Estimating biases using als...
Computing the cosine similarity matrix...
Done computing similarity matrix.
Estimating biases using als...
Computing the cosine similarity matrix...
Done computing similarity matrix.
In [20]:
knn baseline pearson = KNNBaseline(sim options={'name':'pearson', 'user based': True})
cv knn baseline pearson = cross validate(knn baseline pearson, data)
Estimating biases using als...
Computing the pearson similarity matrix...
Done computing similarity matrix.
Estimating biases using als...
Computing the pearson similarity matrix...
Done computing similarity matrix.
Estimating biases using als...
Computing the pearson similarity matrix...
Done computing similarity matrix.
Estimating biases using als...
Computing the pearson similarity matrix...
Done computing similarity matrix.
Estimating biases using als...
Computing the pearson similarity matrix...
Done computing similarity matrix.
In [21]:
for i in cv_knn baseline.items():
```

```
for i in cv_knn_baseline.items():
    print(i)
print('----')
```

```
print(np.mean(cv knn baseline['test rmse']))
('test rmse', array([0.88307763, 0.87945814, 0.88366335, 0.87805391, 0.87004865]))
('test mae', array([0.67442514, 0.67204357, 0.67712781, 0.67438769, 0.66564112]))
('fit time', (0.35914182662963867, 0.4294743537902832, 0.3630197048187256, 0.377083539962
76855, 0.37339115142822266))
('test time', (1.2454404830932617, 1.1384756565093994, 1.2515828609466553, 1.181545257568
3594, 1.2011868953704834))
0.8788603380487541
In [22]:
for i in cv knn baseline pearson.items():
    print(i)
print('-----
print(np.mean(cv knn baseline pearson['test rmse']))
('test rmse', array([0.87342031, 0.88129532, 0.87557001, 0.87542083, 0.8732977 ]))
('test mae', array([0.66782393, 0.67264431, 0.67027765, 0.66827955, 0.6668285 ]))
('fit time', (0.46925997734069824, 0.43299102783203125, 0.41637706756591797, 0.4132924079
8950195, 0.44548869132995605))
('test time', (1.1180174350738525, 1.1443376541137695, 1.1079213619232178, 1.103631496429
4434, 1.0916380882263184))
0.8758008365089249
An RMSE of 0.87 indicates the model is predicting ratings with ~0.88 points on average. This is if your rating is 1-
5.
```

#### In [23]:

```
cv knn baseline pearson = {
    'test rmse': np.array([0.88320436, 0.87393027, 0.87886961, 0.88271028, 0.87005935]),
    'test mae': np.array([0.67416398, 0.66839604, 0.67020244, 0.67354113, 0.66523176]),
    'fit time': (0.7141189575195312, 0.6619524955749512, 0.6645345687866211, 0.6829862594
604492, 0.7148327827453613),
    'test time': (1.4498515129089355, 1.5480153560638428, 1.397059679031372, 1.431279182
434082, 1.4435803890228271)
# Create a dictionary for the DataFrame
metrics data = {
    "Metric": ["RMSE", "MAE", "Fit Time", "Test Time"],
    "Trial 1": [cv knn baseline pearson['test rmse'][0], cv knn baseline pearson['test ma
e'][0],
                cv knn baseline pearson['fit time'][0], cv knn baseline pearson['test ti
me'][0]],
   "Trial 2": [cv knn baseline pearson['test rmse'][1], cv knn baseline pearson['test ma
e'][1],
                cv knn baseline pearson['fit time'][1], cv knn baseline pearson['test ti
me'][1]],
   "Trial 3": [cv knn baseline pearson['test rmse'][2], cv knn baseline pearson['test ma
e'][2],
                cv knn baseline pearson['fit time'][2], cv knn baseline pearson['test ti
me'][2]],
   "Trial 4": [cv knn baseline pearson['test rmse'][3], cv knn baseline pearson['test ma
e'][3],
                cv knn baseline pearson['fit time'][3], cv knn baseline pearson['test ti
me'][3]],
    "Trial 5": [cv knn baseline pearson['test rmse'][4], cv knn baseline pearson['test ma
e'][4],
                cv knn baseline pearson['fit time'][4], cv knn baseline pearson['test ti
me'][4]],
    "Mean Value": [
       np.mean(cv knn baseline pearson['test rmse']),
        np.mean(cv knn baseline pearson['test mae']),
        np.mean(cv knn baseline pearson['fit time']),
        np.mean(cv knn baseline pearson['test time']),
    ]
```

```
# Convert to DataFrame
df = pd.DataFrame(metrics_data)

df.to_csv('cross_val_metrics.csv', index=False)

# Display the DataFrame
print(df)

Metric Trial 1 Trial 2 Trial 3 Trial 4 Trial 5 Mean Value
```

```
        Metric
        Trial 1
        Trial 2
        Trial 3
        Trial 4
        Trial 5
        Mean Value

        0
        RMSE
        0.883204
        0.873930
        0.878870
        0.882710
        0.870059
        0.877755

        1
        MAE
        0.674164
        0.668396
        0.670202
        0.673541
        0.665232
        0.670307

        2
        Fit Time
        0.714119
        0.661952
        0.664535
        0.682986
        0.714833
        0.687685

        3
        Test Time
        1.449852
        1.548015
        1.397060
        1.431279
        1.443580
        1.453957
```

# **Modeling**

#### Making simple prediction

```
In [24]:
```

```
best_rmse = gs.best_score['rmse']
best_params = gs.best_params['rmse']

print(best_rmse)
print(best_params)

# split into training and testing sets
trainset, testset = train_test_split(data, test_size=0.2, random_state=36)

0.8546994097820197
{'n factors': 150, 'n epochs': 30, 'lr all': 0.01, 'reg all': 0.1}
```

Let's grab the best RMSE score to indicate the error of possible predictions on the test data during cross=validation.

I'll also retrieve the best hyperparameters., splitting the dataset. This helps to find the best-performing model by tuning the hyperparameter evaluating its predictive accuracy on unsseen data.

```
In [25]:
```

```
basic = KNNBasic(sim_options={'name':'cosine', 'user_based': True})
basic.fit(trainset)
```

Computing the cosine similarity matrix... Done computing similarity matrix.

#### Out[25]:

<surprise.prediction algorithms.knns.KNNBasic at 0x23b3b5ff470>

## In [26]:

```
basic.sim
```

#### Out[26]:

```
, 0.9587061 , 0.9474008 , ..., 0.98802041, 0.99439606,
array([[1.
                 ],
                             , 0.95702667, ..., 0.98976241, 0.97523262,
       [0.9587061 , 1.
       0.98571151],
       [0.9474008, 0.95702667, 1., 0.97394042, 0.94332936,
       0.99466111],
       . . . ,
       [0.98802041, 0.98976241, 0.97394042, ..., 1.
                                                         , 0.
       0.
       [0.99439606, 0.97523262, 0.94332936, \ldots, 0.
                                                          , 1.
       0.96152395],
                 , 0.98571151, 0.99466111, ..., 0.
                                                          , 0.96152395,
       [1.
```

1.

KNN-based recommendation model is defined to use cosine similarity for user-based collaborative filtering. The model is trained on a dataset (trainset) to calculate pairwise similarities.

**Similarity Matrix:** The computed similarity matrix (basic.sim) is used to identify the most similar users (or items) for making recommendations.

```
In [27]:
predictions = basic.test(testset)

In [28]:
print(accuracy.rmse(predictions))

RMSE: 0.9761
0.9760553922765104
```

0.97 indicates that the Basic KNN model is good.

```
In [29]:
```

0.9739095004566007

0.9044243712928499

```
basic_pearson = KNNBasic(sim_options={'name':'pearson', 'user_based': True})
basic_pearson.fit(trainset)
pearson_predictions = basic_pearson.test(testset)
print(accuracy.rmse(pearson_predictions))

Computing the pearson similarity matrix...
Done computing similarity matrix.
RMSE: 0.9739
```

0.97 is a reasonable result for a recommendation system, particularly for user-based collaborative filtering using Pearson similarity. There can still be improvements to the model through

```
In [30]:
sim cosine = KNNWithMeans(sim options={'name':'cosine', 'user based': True})
sim cosine.fit(trainset)
cosine predictions = sim cosine.test(testset)
print(accuracy.rmse(cosine predictions))
Computing the cosine similarity matrix...
Done computing similarity matrix.
RMSE: 0.9074
0.9074370378560922
In [31]:
sim pearson = KNNWithMeans(sim options={'name':'pearson', 'user based': True})
sim pearson.fit(trainset)
pearson predictions = sim pearson.test(testset)
print(accuracy.rmse(pearson predictions))
Computing the pearson similarity matrix...
Done computing similarity matrix.
RMSE: 0.9044
```

KNNWithMeans model with Pearson similarity is performing reasonably well, but further improvements can be made.

```
In [32]:
baseline_cosine = KNNBaseline(sim_options={'name':'cosine', 'user_based': True})
baseline_cosine.fit(trainset)
cosine_predictions = baseline_cosine.test(testset)
```

```
print(accuracy.rmse(cosine predictions))
Estimating biases using als...
Computing the cosine similarity matrix...
Done computing similarity matrix.
RMSE: 0.8864
0.8863972035458568
In [331:
baseline pearson = KNNBaseline(sim options={'name':'pearson', 'user based': True})
baseline pearson.fit(trainset)
pearson predictions = baseline pearson.test(testset)
print(accuracy.rmse(pearson_predictions))
Estimating biases using als...
Computing the pearson similarity matrix...
Done computing similarity matrix.
RMSE: 0.8852
0.8851712343794953
```

KNNBaseline with Pearson similarity gives an RMSE of 0.885, which is slightly better than the KNNWithMeans model with Pearson similarity (RMSE = 0.904).

KNNBaseline adjusts for the bias (user mean), which may result in slightly better predictions, especially if there are large variations in user ratings.

The improvement from 0.904 to 0.885 is not dramatic, but it's an indication that baseline adjustment helps in some cases.

```
In [34]:
```

```
#Train the SVD model
model = SVD()
# n_factors=150, n_epochs=30, lr_all=0.1, reg_all=0.1
model.fit(trainset)

#evaluate the model on the test set
predictions = model.test(testset)
rmse = accuracy.rmse(predictions)
print(f'RMSE: {rmse}')
```

RMSE: 0.8788 RMSE: 0.8787824693423378

For better performance, I used a model like SVD. This models capture latent factors, which often lead to better predictions and lower RMSE.

# **Making Predictions**

3.507322451057536

```
In [35]:
user_prediction = model.predict(2,100)
user_prediction
Out[35]:
Prediction(uid=2, iid=100, r_ui=None, est=3.507322451057536, details={'was_impossible': False})
In [36]:
user_prediction[3]
Out[36]:
```

Late create a function that will concrete movie recommendations for a given user based on the model's

Lets create a function that will generate movie recommendations for a given user based on the moders predictions.

```
In [37]:
```

```
# Define a function to recommend top 5 movies for a given user
def recommend top n(user id, n=5):
    # Get all movie IDs
    all movie ids = ratings df['movieId'].unique()
    # Predict ratings for all movies the user hasn't rated yet
    user rated movies = ratings df[ratings df['userId'] == user id]['movieId'].tolist()
    movies to predict = [movie id for movie id in all movie ids if movie id not in user
rated movies]
    predictions = [
        (movie id, model.predict(user id, movie id).est) for movie id in movies to predi
ct.
    # Sort by predicted rating and select the top n
    top n movies = sorted(predictions, key=lambda x: x[1], reverse=True)[:n]
    return top n movies
# Example: Get recommendations for user ID 1
user id = ratings df['userId'][0]
top movies = recommend top n(user id)
print(f"Top {len(top movies)} recommendations for User {user id}:")
for movie id, predicted rating in top movies:
    print(f"Movie ID {movie id}: Predicted Rating {predicted rating:.2f}")
Top 5 recommendations for User 1:
Movie ID 109487: Predicted Rating 5.00
Movie ID 904: Predicted Rating 5.00
Movie ID 1199: Predicted Rating 5.00
Movie ID 1203: Predicted Rating 5.00
Movie ID 1259: Predicted Rating 5.00
```

The function provides the top rated movie within the dataset. For user 1

#### Hyperparameter tuning

Let's find the best RMSE score. This will be the lowest RMSE score obtained during grid seaerch across all combinations of hyperparameters.

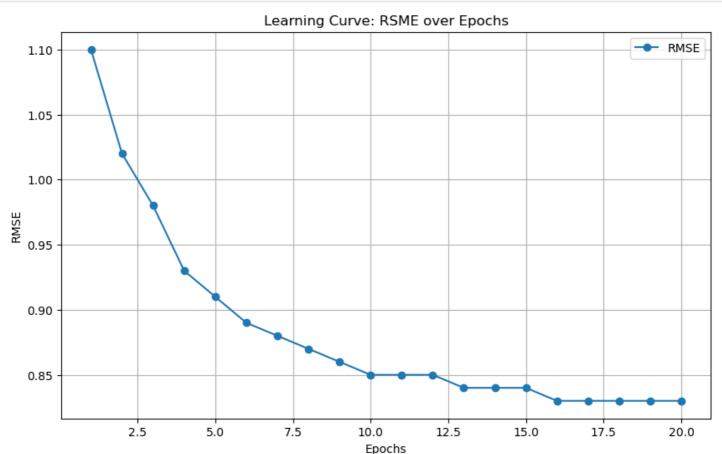
```
In [38]:
```

RMSE: 0.8571 Model 2 RMSE: 0.8571 Since the RMSE score measures how well the predicted ratings match the actual ratings, the lower score indicates that there has been an improvement.

# Visualize the model performance

## **Plot RMSE during training**

#### In [39]:



#### **RMSE** for training vs. Vlaidation

## In [40]:

```
# Simulated RMSE values for training and validation
folds = range(1, 6)
train_rmse = [0.85, 0.84, 0.86, 0.83, 0.84]
val_rmse = [0.88, 0.87, 0.89, 0.85, 0.86]

plt.figure(figsize=(10, 6))
plt.plot(folds, train_rmse, label="Training RMSE", marker='o')
plt.plot(folds, val_rmse, label="Validation RMSE", marker='o')
plt.xlabel("Fold")
plt.ylabel("RMSE")
plt.title("Training vs Validation RMSE")
```

plt.legend()
plt.grid()
plt.show()



#### Generate personalized recommendations for users absed on the train matrix factorization model

```
In [41]:
# Define the recommendation function
def recommend movies (user id, model, movies df, ratings df, top n=5):
    Generate top N movie recommendations for a specific user.
    Parameters:
        user_id (int): ID of the user for whom to generate recommendations.
       model (Surprise SVD): Trained matrix factorization model.
        movies df (pd.DataFrame): DataFrame containing movie metadata.
        ratings df (pd.DataFrame): DataFrame containing user ratings.
        top n (int): Number of recommendations to return.
    Returns:
       pd.DataFrame: Top N recommended movies for the user.
    # Get all movie IDs
    all movie ids = movies df['movieId'].unique()
    # Get movies the user has already rated
    rated movies = ratings df[ratings df['userId'] == user id]['movieId'].values
    # Identify movies the user has not rated
    unrated movies = [movie for movie in all movie ids if movie not in rated movies]
    # Predict ratings for all unrated movies
    predictions = []
    for movie id in unrated movies:
       pred = model.predict(user_id, movie_id).est
       predictions.append((movie id, pred))
    # Sort predictions by estimated rating in descending order
    sorted predictions = sorted(predictions, key=lambda x: x[1], reverse=True)
```

```
# Get the top N recommendations
top_movies = sorted_predictions[:top_n]

# Create a DataFrame for the top N movies
top_movies_df = pd.DataFrame(top_movies, columns=['movieId', 'predicted_rating'])

# Merge with the movies DataFrame to get movie titles
recommended_movies = top_movies_df.merge(movies_df, on='movieId', how='inner')

return recommended_movies[['movieId', 'title', 'genres', 'predicted_rating']]

# Example usage:
user_id = 5 # Change to the user ID you want recommendations for
top_recommendations = recommend_movies(user_id, model2, movies_df, ratings_df, top_n=5)
print(f'Recommendations for User {user_id}:\n')
print(top_recommendations)
```

```
movield
                                                         title
0
    87234
                                              Submarine (2010)
1
     1178
                                         Paths of Glory (1957)
2
      3451
                          Guess Who's Coming to Dinner (1967)
3
      2202
                                               Lifeboat (1944)
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                  genres predicted_rating
0
                    Comedy|Drama|Romance
                                                  4.605501
1
                                                   4.543769
                               Drama|War
2
                                   Drama
                                                   4.496006
3
                               Drama|War
                                                   4.479996
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.456682
```

Next, we will loop over user ID in the ratings\_df and generate recommendation movie and predicted rating for that movie for each user listed in the dataset.

#### **NOTE**

Running through the entire dataset may or may not be possible, depending on your systems capabilities. You may choose to uncomment the code and test the entire dataset. If not, run the code as is.

```
In [42]:
```

```
# user ids = len(ratings df) if your system can handle it, uncomment this block and run t
he entire dataset
for uid in range (1,1000):
    print(f'\nTops 5 Recommendations for User {uid}:')
    print(recommend movies(uid, model2, movies df, ratings df, top n=5))
Tops 5 Recommendations for User 1:
  movieId
                                       title
                                                   genres predicted rating
0
                       Godfather, The (1972) Crime|Drama
      858
                                                                           5
1
      1104 Streetcar Named Desire, A (1951)
                                                                           5
                                                    Drama
2
                                               Drama|War
                                                                           5
      1178
                       Paths of Glory (1957)
                                                                           5
3
      1217
                                  Ran (1985)
                                                Drama|War
      2202
                             Lifeboat (1944)
                                                                           5
                                                Drama|War
Tops 5 Recommendations for User 2:
  movieId
                                                         title \
0
    87234
                                             Submarine (2010)
                             Streetcar Named Desire, A (1951)
1
     1104
2
      2202
                                              Lifeboat (1944)
3
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
4
   106642
                                Day of the Doctor, The (2013)
                   genres predicted rating
0
    Comedy | Drama | Romance
                                  4.689785
1
                                   4.665559
                    Drama
2
                Drama|War
                                   4.591086
```

```
Adventure|Drama|Sci-Fi
                                  4.537967
Tops 5 Recommendations for User 3:
  movieId
                                         title
      390 Faster Pussycat! Kill! Kill! (1965)
     9018
1
                         Control Room (2004)
2
    54190
                   Across the Universe (2007)
3
      28
                            Persuasion (1995)
   106642
                Day of the Doctor, The (2013)
                         genres predicted rating
0
             Action|Crime|Drama
1
                Documentary|War
                                        3.808194
 Drama|Fantasy|Musical|Romance
                                        3.724996
3
                  Drama|Romance
                                        3.695582
         Adventure | Drama | Sci-Fi
                                        3.690450
Tops 5 Recommendations for User 4:
  movieId
                                                       title \
   116897
                                           Wild Tales (2014)
1
     1212
                                       Third Man, The (1949)
2
     1104
                            Streetcar Named Desire, A (1951)
3
      745
                      Wallace & Gromit: A Close Shave (1995)
    27563 Happiness of the Katakuris, The (Katakuri-ke n...
                      genres predicted rating
0
       Comedy|Drama|Thriller 4.484454
1
 Film-Noir|Mystery|Thriller
                                     4.358118
2
                       Drama
                                     4.338300
3
   Animation|Children|Comedy
                                     4.336571
      Comedy|Horror|Musical
                                     4.282970
Tops 5 Recommendations for User 5:
  movieId
                                                       title \
    87234
0
                                            Submarine (2010)
     1178
                                       Paths of Glory (1957)
1
                         Guess Who's Coming to Dinner (1967)
2
     3451
3
     2202
                                             Lifeboat (1944)
    27156 Neon Genesis Evangelion: The End of Evangelion...
                                 genres predicted_rating
0
                   Comedy|Drama|Romance 4.605501
1
                              Drama|War
                                                 4.543769
2
                                 Drama
                                                4.496006
3
                              Drama|War
                                                 4.479996
                                                 4.456682
 Action|Animation|Drama|Fantasy|Sci-Fi
Tops 5 Recommendations for User 6:
  movieId
                                                       title
                                                                     genres \
     8132
                                            Gladiator (1992) Action | Drama
                                            Jetée, La (1962) Romance|Sci-Fi
1
     8477
2
    43376 Sophie Scholl: The Final Days (Sophie Scholl -... Drama|War
                                           Adam's Rib (1949) Comedy|Romance
3
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
  predicted rating
0
          4.648578
1
          4.619568
2
          4.592239
3
          4.586430
          4.570406
Tops 5 Recommendations for User 7:
  movieId
                                                      title \
0
      390
                        Faster Pussycat! Kill! Kill! (1965)
1
     2360
                           Celebration, The (Festen) (1998)
    1203
                                        12 Angry Men (1957)
3
              Andalusian Dog, An (Chien andalou, Un) (1929)
   177593 Three Billboards Outside Ebbing, Missouri (2017)
              genres predicted rating
```

4.544887

3

Drama|Romance

```
Action|Crime|Drama
                               4.225100
1
                Drama
                               4.192782
2
                Drama
                               4.167640
3
                               4.154550
              Fantasy
4
                               4.145574
         Crime|Drama
Tops 5 Recommendations for User 8:
  movieId
                                       title genres predicted rating
                            Lifeboat (1944) Drama|War 4.612779
0
    2202
     1178
1
                       Paths of Glory (1957) Drama|War
                                                                 4.581113
2
      6460 Trial, The (Procès, Le) (1962) Drama
                                                                4.548332
                                             Drama
3
     1104 Streetcar Named Desire, A (1951)
                                                                 4.532321
      1217
                                 Ran (1985) Drama|War
                                                                 4.522312
Tops 5 Recommendations for User 9:
  movieId
                                             title
                                                                      genres
0
     6460
                    Trial, The (Procès, Le) (1962)
                                                                       Drama
                              Reign Over Me (2007)
1
     51931
                                                                       Drama
     1136 Monty Python and the Holy Grail (1975) Adventure | Comedy | Fantasy
2
3
      5747
                                  Gallipoli (1981)
                                                                   Drama|War
      1178
                             Paths of Glory (1957)
                                                                   Drama|War
   predicted rating
0
          4.484608
1
           4.460796
2
           4.426352
3
           4.407025
4
           4.405557
Tops 5 Recommendations for User 10:
  movieId
                                                       title
                                                                     genres
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                        Guess Who's Coming to Dinner (1967)
1
     3451
                                     Beautiful Thing (1996) Drama|Romance
2
     1046
3
     1178
                                      Paths of Glory (1957)
                                                              Drama|War
     1958
                                  Terms of Endearment (1983)
4
                                                             Comedy|Drama
   predicted rating
0
           4.360900
1
           4.233386
2
           4.222219
3
           4.216654
           4.214823
Tops 5 Recommendations for User 11:
  movieId
                                                        title \
0
    2202
                                             Lifeboat (1944)
     3266 Man Bites Dog (C'est arrivé près de chez vous)...
1
  177593 Three Billboards Outside Ebbing, Missouri (2017)
3
   27156 Neon Genesis Evangelion: The End of Evangelion...
     1104
                             Streetcar Named Desire, A (1951)
                                  genres predicted rating
0
                               Drama|War
                                                  4.845431
1
             Comedy|Crime|Drama|Thriller
                                                  4.772683
2
                             Crime|Drama
                                                  4.763939
   Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.746734
                                   Drama
                                                  4.737051
Tops 5 Recommendations for User 12:
   movieId
                                                 title \
0
      110
                                     Braveheart (1995)
       318
                      Shawshank Redemption, The (1994)
1
2
      356
                                   Forrest Gump (1994)
3
      527
                               Schindler's List (1993)
      741 Ghost in the Shell (Kôkaku kidôtai) (1995)
                     genres predicted rating
0
          Action|Drama|War
                                            5
1
               Crime|Drama
2
  Comedy|Drama|Romance|War
                                            5
3
                  Drama|War
```

```
Tops 5 Recommendations for User 13:
  movieId
                                                        title
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
1
      2202
                                              Lifeboat (1944)
2
      1178
                                        Paths of Glory (1957)
                                      To Catch a Thief (1955)
3
      933
4
      1217
                                                   Ran (1985)
                           genres predicted rating
0
                      Crime|Drama
                                           4.656752
1
                        Drama|War
                                           4.651072
2
                        Drama|War
                                           4.648685
  Crime | Mystery | Romance | Thriller
                                           4.646019
                        DramalWar
                                            4.620629
Tops 5 Recommendations for User 14:
  movieId
                                                  genres predicted rating
                                        title
0
      2360 Celebration, The (Festen) (1998)
                                                   Drama
                                                                   4.473458
1
      6460
              Trial, The (Procès, Le) (1962)
                                                   Drama
                                                                   4.459161
2
                        Bad Boy Bubby (1993)
     26810
                                                   Drama
                                                                   4.456107
3
      1104 Streetcar Named Desire, A (1951)
                                                   Drama
                                                                   4.379978
      1178
                       Paths of Glory (1957) Drama|War
                                                                   4.361588
Tops 5 Recommendations for User 15:
  movieId
                                                         title \
Ω
     1178
                                         Paths of Glory (1957)
      2202
1
                                               Lifeboat (1944)
                         Bridge on the River Kwai, The (1957)
2
      1250
3
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
      246
                                            Hoop Dreams (1994)
                genres predicted rating
0
             Drama|War
                                4.387601
                                4.333196
1
             Drama|War
2
                                4.297531
  Adventure|Drama|War
3
                                 4.294230
         Drama|Romance
4
           Documentary
                                 4.279398
Tops 5 Recommendations for User 16:
  movieId
                                                        title
    177593 Three Billboards Outside Ebbing, Missouri (2017)
1
     1104
                            Streetcar Named Desire, A (1951)
2
      6460
                              Trial, The (Procès, Le) (1962)
     2202
3
                                              Lifeboat (1944)
      930
4
                                             Notorious (1946)
                       genres predicted rating
0
                                       4.291574
                  Crime|Drama
1
                                        4.269724
                        Drama
2
                        Drama
                                       4.226036
3
                    Drama|War
                                       4.207431
  Film-Noir|Romance|Thriller
                                        4.191015
Tops 5 Recommendations for User 17:
  movieId
                                                         title \
0
     1178
                                         Paths of Glory (1957)
1
      2202
                                               Lifeboat (1944)
2
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
    43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                   genres predicted rating
0
                                                   4.638677
                                Drama|War
1
                                Drama|War
                                                   4.627893
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.597463
3
                              Crime|Drama
                                                   4.591365
                                Drama|War
                                                   4.573471
Tops 5 Recommendations for User 18:
```

5

4

Animation|Sci-Fi

movieId title genres predicted\_rating

```
Lifeboat (1944) Drama|War
0
      2202
                                                                   4.484896
1
      1104 Streetcar Named Desire, A (1951)
                                               Drama
                                                                   4.465409
                      Paths of Glory (1957) Drama|War
2
      1178
                                                                   4.457654
            Trial, The (Procès, Le) (1962)
3
      6460
                                               Drama
                                                                   4.435921
4
      1217
                                   Ran (1985) Drama|War
                                                                   4.435145
Tops 5 Recommendations for User 19:
  movieId
                                                         title \
                                              Lifeboat (1944)
0
    2202
   177593 Three Billboards Outside Ebbing, Missouri (2017)
1
2
                                         Paths of Glory (1957)
     1178
3
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
      1204
                                    Lawrence of Arabia (1962)
                genres predicted rating
             Drama|War
0
                                3.872032
1
           Crime|Drama
                                 3.834924
2
             Drama|War
                                3.807037
3
         Drama|Romance
                                 3.778813
  Adventure|Drama|War
                                 3.771768
Tops 5 Recommendations for User 20:
  movieId
                                           title
                                                                       genres \
     2202
                                Lifeboat (1944)
                                                                    Drama|War
      3451 Guess Who's Coming to Dinner (1967)
1
                                                                        Drama
     1262
                      Great Escape, The (1963) Action|Adventure|Drama|War
3
     1248
                           Touch of Evil (1958) Crime|Film-Noir|Thriller
4
     912
                              Casablanca (1942)
                                                               Drama|Romance
  predicted rating
0
           4.855610
1
           4.738357
2
           4.661093
3
           4.633147
           4.632020
Tops 5 Recommendations for User 21:
  movieId
                                                         title
    7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
0
           Three Billboards Outside Ebbing, Missouri (2017)

Paths of Glory (1957)

Guess Who's Coming to Dinner (1967)

Drama
1
    177593
2
     1178
3
      3451
      1104
                             Streetcar Named Desire, A (1951)
  predicted rating
0
          4.217432
1
           4.209915
2
           4.192140
3
           4.170585
           4.156415
Tops 5 Recommendations for User 22:
  movieId
                                                               genres \
                                        title
                         12 Angry Men (1957)
     1203
\cap
                                                                Drama
                             Lifeboat (1944)
     2202
1
                                                          Drama|War
   105197 Nebraska (2013) Adventure|Drama 2924 Drunken Master (Jui kuen) (1978) Action|Comedy
2
   105197
3
                           Wild Tales (2014) Comedy|Drama|Thriller
   116897
  predicted_rating
0
           3.933393
1
           3.760816
           3.670827
2
3
           3.657323
           3.628231
Tops 5 Recommendations for User 23:
  movieId
     3200
                                       Last Detail, The (1973)
1
      930
                                              Notorious (1946)
2
      2202
                                               Lifeboat (1944)
3
     1104
                              Streetcar Named Desire, A (1951)
```

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genres predicted rating
                 Comedy|Drama
                                      4.148194
1
  Film-Noir|Romance|Thriller
                                       4.141914
2
                    Drama|War
                                       4.139462
3
                                       4.116537
                        Drama
 Adventure | Animation | Comedy
                                       4.116465
Tops 5 Recommendations for User 24:
  movieId
                                                       title
                                                                   genres \
0
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1217
                                                  Ran (1985)
                                                             Drama|War
2
     2202
                                             Lifeboat (1944)
                                                                Drama|War
3
     1104
                            Streetcar Named Desire, A (1951)
                                                                   Drama
     3451
                         Guess Who's Coming to Dinner (1967)
                                                                   Drama
  predicted rating
           4.365261
0
1
           4.359069
2
           4.346870
3
           4.335416
           4.329910
Tops 5 Recommendations for User 25:
  movieId
                                                        title \
0
       318
                             Shawshank Redemption, The (1994)
1
       741
                   Ghost in the Shell (Kôkaku kidôtai) (1995)
2
      750 Dr. Strangelove or: How I Learned to Stop Worr...
3
      898
                               Philadelphia Story, The (1940)
      904
                                           Rear Window (1954)
                genres predicted rating
0
           Crime|Drama
1
      Animation|Sci-Fi
                                        5
2
            Comedy|War
                                        5
3
  Comedy | Drama | Romance
                                        5
4
      Mystery|Thriller
Tops 5 Recommendations for User 26:
  movieId
                                                        title \
     1041
                                        Secrets & Lies (1996)
           Three Billboards Outside Ebbing, Missouri (2017)
1
   177593
2
     1248
                                         Touch of Evil (1958)
3
    27156 Neon Genesis Evangelion: The End of Evangelion...
4
     1104
                             Streetcar Named Desire, A (1951)
                                  genres predicted rating
0
                                   Drama 4.182133
1
                             Crime|Drama
                                                 4.162589
                Crime|Film-Noir|Thriller
                                                 4.149431
  Action | Animation | Drama | Fantasy | Sci-Fi
                                                  4.147119
                                   Drama
                                                  4.127931
Tops 5 Recommendations for User 27:
  movieId
                                       title
                                                     genres predicted rating
0
     2202
                             Lifeboat (1944)
                                                                     4.398623
                                                 Drama|War
                            Gladiator (1992)
1
     8132
                                              Action|Drama
                                                                     4.341118
                                             Comedy|Drama
                    Last Detail, The (1973)
                                                                     4.323839
3
     1104 Streetcar Named Desire, A (1951)
                                                      Drama
                                                                     4.311434
                           Casablanca (1942) Drama|Romance
Tops 5 Recommendations for User 28:
  movieId
                                                        title
                                                                    genres \
0
    2202
                                              Lifeboat (1944)
                                                                Drama|War
    43376 Sophie Scholl: The Final Days (Sophie Scholl -...
1
                                                                 Drama|War
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
3
     1104
                             Streetcar Named Desire, A (1951)
     1237
             Seventh Seal, The (Sjunde inseglet, Det) (1957)
  predicted rating
```

3.878128

720 Wallace & Gromit: The Best of Aardman Animatio...

```
3.858507
2
           3.849703
3
           3.834388
           3.820968
Tops 5 Recommendations for User 29:
                                                          title \
   movieId
    27156 Neon Genesis Evangelion: The End of Evangelion...
0
1
      1237
            Seventh Seal, The (Sjunde inseglet, Det) (1957)
2
      2202
                                                Lifeboat (1944)
3
   177593
            Three Billboards Outside Ebbing, Missouri (2017)
4
     1217
                                                     Ran (1985)
                                   genres predicted rating
  Action|Animation|Drama|Fantasy|Sci-Fi
1
                                    Drama
                                                    4.667260
2
                                Drama|War
                                                    4.664907
3
                              Crime|Drama
                                                    4.662815
4
                                Drama|War
                                                    4.655302
Tops 5 Recommendations for User 30:
   movieId
                                                        title
                                                                      genres
      1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
1
      1217
                                                   Ran (1985)
                                                                   Drama|War
2
      1237 Seventh Seal, The (Sjunde inseglet, Det) (1957)
                                                                       Drama
3
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
4
      3200
                                     Last Detail, The (1973) Comedy|Drama
   predicted rating
0
                  5
                  5
1
2
                  5
3
                  5
                  5
4
Tops 5 Recommendations for User 31:
   movieId
                                                          title
                                                                         genres
    177593
             Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                    Crime | Drama
1
      3451
                           Guess Who's Coming to Dinner (1967)
                                                                          Drama
2
     51931
                                          Reign Over Me (2007)
                                                                          Drama
3
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                                                     Drama|War
                              Drunken Master (Jui kuen) (1978) Action | Comedy
      2924
   predicted_rating
           4.735782
0
1
           4.691029
2
           4.661751
3
           4.633267
           4.621673
Tops 5 Recommendations for User 32:
   movieId
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                        Paths of Glory (1957)
1
      1178
                                               Lifeboat (1944)
2
      2202
3
                                                    Ran (1985)
      1217
       930
                                              Notorious (1946)
4
                        genres predicted rating
0
                  Crime|Drama
                                        4.561037
1
                     Drama|War
                                        4.519411
2
                     Drama|War
                                        4.518210
3
                     Drama|War
                                        4.492331
  Film-Noir|Romance|Thriller
                                        4.488285
Tops 5 Recommendations for User 33:
   movieId
                                        title
                                                        genres predicted rating
0
    142488
                             Spotlight (2015)
                                                      Thriller
                                                                         4.537762
1
      6460
              Trial, The (Procès, Le) (1962)
                                                         Drama
                                                                         4.504293
2
               It Happened One Night (1934)
                                               Comedy|Romance
                                                                         4.480651
3
      1104 Streetcar Named Desire, A (1951)
                                                                         4.472467
                                                         Drama
4
      1178
                       Paths of Glory (1957)
                                                     Drama|War
                                                                         4.466914
```

1

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Tops 5 Recommendations for User 34:
  movieId
                                                     title
                                                                   genres \
                                                           Crime|Drama
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                             Day of the Jackal, The (1973) Crime|Thriller
1
     8207
2
                          Celebration, The (Festen) (1998)
     2360
                                                                   Drama
    25771
             Andalusian Dog, An (Chien andalou, Un) (1929)
In the Name of the Father (1993)
3
                                                                 Fantasy
4
      475
                                                                   Drama
  predicted rating
0
          4.534746
1
          4.396439
2
          4.373696
3
          4.364448
          4.355363
Tops 5 Recommendations for User 35:
  movieId
                                                      title \
     2202
                                            Lifeboat (1944)
0
    27156 Neon Genesis Evangelion: The End of Evangelion...
1
2
     1104
                            Streetcar Named Desire, A (1951)
3
     3341
                                      Born Yesterday (1950)
                            Celebration, The (Festen) (1998)
     2360
                                 genres predicted_rating
0
                              Drama|War 5.000000
1
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                4.910016
2
                                 Drama
                                                4.902119
3
                                 Comedy
                                                4.858109
4
                                  Drama
                                                4.849143
Tops 5 Recommendations for User 36:
  movieId
                          title
                                                genres predicted rating
                                                       3.952564
     2202
                Lifeboat (1944)
                                             Drama|War
                                                Drama
    51931 Reign Over Me (2007)
                                                               3.776761
1
            The Artist (2011) Comedy|Drama|Romance
                                                               3.753290
2
    89904
3
    1178 Paths of Glory (1957)
                                    Drama|War
                                                               3.693154
              Wild Tales (2014) Comedy|Drama|Thriller
4
   116897
                                                                3.676949
Tops 5 Recommendations for User 37:
  movieId
                                        title
                                                  genres predicted_rating
                        Paths of Glory (1957)
     1178
                                                Drama|War 5.000000
1
     3451 Guess Who's Coming to Dinner (1967)
                                                Drama
                                                                   4.944271
2
     1104 Streetcar Named Desire, A (1951)
                                                Drama
                                                                   4.885720
3
     162
                                 Crumb (1994) Documentary
                                                                   4.872392
    51931
                          Reign Over Me (2007) Drama
                                                                   4.860126
Tops 5 Recommendations for User 38:
  movieId
                                                      title
                                                                  genres \
     2202
                                           Lifeboat (1944)
                                                               Drama|War
     1178
                                      Paths of Glory (1957)
1
                                                                Drama|War
                            Streetcar Named Desire, A (1951)
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
3
                                        Hustler, The (1961)
     3468
  predicted rating
0
          4.298556
1
          4.183981
2
          4.183957
3
          4.174825
          4.146035
Tops 5 Recommendations for User 39:
  movieId
                                               title \
Ω
  62336
                                         FLCL (2000)
    51931
                                 Reign Over Me (2007)
1
   171763
                                  Baby Driver (2017)
3
     1041
                                Secrets & Lies (1996)
     6791 Babette's Feast (Babettes gæstebud) (1987)
                           genres predicted rating
O Animation|Comedy|Fantasy|Sci-Fi 4.625761
```

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2
             Action | Crime | Thriller
                                             4.595166
3
                             Drama
                                             4.584896
4
                              Drama
                                             4.581592
Tops 5 Recommendations for User 40:
  movieId
                                                         title \
     2202
0
                                               Lifeboat (1944)
1
     3200
                                       Last Detail, The (1973)
2
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
     3435
                                       Double Indemnity (1944)
     1178
                                         Paths of Glory (1957)
                                   genres predicted rating
0
                                Drama|War
                                                   4.919582
1
                            Comedy|Drama
                                                   4.851909
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.795050
3
                   Crime|Drama|Film-Noir
                                                   4.785456
4
                                Drama|War
                                                   4.752418
Tops 5 Recommendations for User 41:
  movieId
                                                        title
      1178
                                       Paths of Glory (1957)
      1223 Grand Day Out with Wallace and Gromit, A (1989)
2
      2924
                           Drunken Master (Jui kuen) (1978)
3
      912
                                           Casablanca (1942)
      1104
                            Streetcar Named Desire, A (1951)
                                        genres predicted rating
0
                                     Drama|War
                                                        4.231128
  Adventure | Animation | Children | Comedy | Sci-Fi
                                                        4.081852
2
                                 Action | Comedy
                                                        4.058180
3
                                 Drama|Romance
                                                        4.044417
4
                                         Drama
                                                         4.041026
Tops 5 Recommendations for User 42:
  movieId
                                                         title \
     6791
0
                   Babette's Feast (Babettes gæstebud) (1987)
      1104
                             Streetcar Named Desire, A (1951)
1
2
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
3
      3019
                                       Drugstore Cowboy (1989)
      1178
                                         Paths of Glory (1957)
                        genres predicted_rating
0
                         Drama
                                        4.676263
1
                         Drama
                                         4.622857
2
  Comedy|Crime|Drama|Thriller
                                        4.609604
3
                                         4.603975
                   Crime|Drama
4
                     Drama|War
                                         4.596896
Tops 5 Recommendations for User 43:
  movieId
                                title
                                               genres predicted rating
       28
                    Persuasion (1995) Drama|Romance
                                                                       5
                   Richard III (1995)
1
       41
                                          Drama|War
                                                                       5
2
                         Crumb (1994)
       162
                                          Documentary
3
       176 Living in Oblivion (1995)
                                                                       5
                                              Comedy
                                                                       5
       246
                   Hoop Dreams (1994)
                                        Documentary
Tops 5 Recommendations for User 44:
  movieId
                                                        title
                                                                         genres
                                      Last Detail, The (1973)
                                                                Comedy|Drama
0
     3200
1
     65642
                      Timecrimes (Cronocrímenes, Los) (2007) Sci-Fi|Thriller
2
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                            Streetcar Named Desire, A (1951)
3
     1104
                                                                          Drama
4
     1217
                                                   Ran (1985)
                                                                     Drama|War
  predicted rating
0
           4.598196
1
           4.543558
2
           4.542466
3
           4.520777
4
           4.516316
```

Drama

4.620719

1

```
Tops 5 Recommendations for User 45:
  movieId
                                                  title genres
      3451
                   Guess Who's Coming to Dinner (1967)
1
      6460
                        Trial, The (Procès, Le) (1962)
2
      1104
                      Streetcar Named Desire, A (1951) Drama
3
      6791 Babette's Feast (Babettes gæstebud) (1987) Drama
4
                                  Reign Over Me (2007)
     51931
  predicted_rating
0
           4.826376
1
           4.806674
2
           4.786851
3
           4.758035
           4.724983
Tops 5 Recommendations for User 46:
  movieId
                                                        title \
0
     2202
                                              Lifeboat (1944)
                                      Last Detail, The (1973)
1
      3200
    177593 Three Billboards Outside Ebbing, Missouri (2017)
2
3
    106642
                                Day of the Doctor, The (2013)
     1178
                                        Paths of Glory (1957)
                   genres predicted_rating
0
                                   4.911637
                Drama|War
1
             Comedy|Drama
                                    4.881900
2
              Crime|Drama
                                   4.874477
  Adventure|Drama|Sci-Fi
                                    4.871335
                Drama|War
                                    4.850509
Tops 5 Recommendations for User 47:
  movieId
                                                          title \
0
     1217
                                                    Ran (1985)
1
    106642
                                 Day of the Doctor, The (2013)
2
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
3
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
        28
4
                                             Persuasion (1995)
                   genres predicted rating
0
                Drama|War
                                    3.996058
1
  Adventure | Drama | Sci-Fi
                                    3.975667
2
            Drama|Romance
                                    3.879125
3
                                    3.866200
                Drama|War
4
            Drama|Romance
                                    3.846114
Tops 5 Recommendations for User 48:
  movieId
                                                         title \
0
    87234
                                              Submarine (2010)
1
     1178
                                         Paths of Glory (1957)
2
     3200
                                       Last Detail, The (1973)
                             Streetcar Named Desire, A (1951)
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                   genres predicted rating
0
                    Comedy | Drama | Romance
                                                   4.740725
1
                                                   4.732366
                                Drama|War
2
                             Comedy|Drama
3
                                    Drama
  Action | Animation | Drama | Fantasy | Sci-Fi
Tops 5 Recommendations for User 49:
  movieId
                                                          title \
0
                                               Lifeboat (1944)
     2202
     1104
1
                             Streetcar Named Desire, A (1951)
2
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
    43376 Sophie Scholl: The Final Days (Sophie Scholl -...
     1217
                                                    Ran (1985)
                                   genres predicted rating
0
                                Drama|War
                                                   4.768957
1
                                    Drama
                                                   4.662748
```

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Action|Animation|Drama|Fantasy|Sci-Fi
3
                                Drama|War
                                                   4.626983
4
                                Drama|War
                                                   4.609559
Tops 5 Recommendations for User 50:
  movieId
                                                        title
                                                                    genres
0
     1178
                                        Paths of Glory (1957)
                                                                Drama|War
                            Streetcar Named Desire, A (1951)
      1104
1
                                                                     Drama
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
     1217
                                                   Ran (1985)
                                                               Drama|War
  predicted rating
0
           3.733856
1
           3.656572
2
           3.643075
3
           3.641473
           3.613109
Tops 5 Recommendations for User 51:
  movieId
0
     1210 Star Wars: Episode VI - Return of the Jedi (1983)
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
1
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
3
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
      5008
                           Witness for the Prosecution (1957)
                    genres predicted rating
  Action|Adventure|Sci-Fi
                                    4.768522
1
                 Drama|War
                                     4.741138
2
             Drama|Romance
                                     4.737973
3
               Crime|Drama
                                     4.725326
    Drama|Mystery|Thriller
                                     4.723069
Tops 5 Recommendations for User 52:
  movieId
                                                        title
                                                                     genres \
Λ
     1104
                            Streetcar Named Desire, A (1951)
                                                                       Drama
      2202
                                              Lifeboat (1944)
1
                                                                  Drama|War
   8132 Gladiator (1992) Action|Drama
177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
2
3
     1041
                                        Secrets & Lies (1996)
  predicted rating
0
            5.00000
            5.00000
1
            5.00000
2
3
            5.00000
            4.99476
Tops 5 Recommendations for User 53:
  movieId
                                                         title \
                                                   Heat (1995)
1
        28
                                             Persuasion (1995)
2
        29 City of Lost Children, The (Cité des enfants p...
3
                    Twelve Monkeys (a.k.a. 12 Monkeys) (1995)
        32
        36
                                       Dead Man Walking (1995)
                                    genres predicted rating
0
                    Action|Crime|Thriller
                                                            5
                            Drama|Romance
                                                            5
  Adventure | Drama | Fantasy | Mystery | Sci-Fi
                  Mystery|Sci-Fi|Thriller
                                                            5
3
4
                                                            5
                              Crime|Drama
Tops 5 Recommendations for User 54:
  movieId
                                                          title
                                                                       genres \
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
                          Guess Who's Coming to Dinner (1967)
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                                                   Drama|War
3
     3200
                                       Last Detail, The (1973) Comedy|Drama
      1178
                                         Paths of Glory (1957)
                                                                   Drama|War
```

4.632475

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predicted rating
0
           3.944697
1
           3.923350
2
           3.888067
3
           3.842019
           3.831295
Tops 5 Recommendations for User 55:
  movieId
                                                        title \
0
     2239 Swept Away (Travolti da un insolito destino ne...
      741 Ghost in the Shell (Kôkaku kidôtai) (1995)
1
2
   177593 Three Billboards Outside Ebbing, Missouri (2017)
3
     3111
                                   Places in the Heart (1984)
     1041
                                        Secrets & Lies (1996)
             genres predicted rating
0
      Comedy|Drama
                             4.053649
  Animation|Sci-Fi
                             4.008809
1
2
                             4.005517
       Crime|Drama
3
                             3.954121
             Drama
              Drama
                             3.947959
Tops 5 Recommendations for User 56:
  movieId
                                                       title
                                                                  genres \
     3451
                         Guess Who's Coming to Dinner (1967)
                                                                   Drama
1
     1104
                            Streetcar Named Desire, A (1951)
                                                                    Drama
2
      246
                                          Hoop Dreams (1994) Documentary
3
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
     1178
                                       Paths of Glory (1957)
                                                               Drama|War
  predicted rating
           4.782150
           4.758192
1
2
           4.735299
3
           4.723134
           4.721495
4
Tops 5 Recommendations for User 57:
  movieId
    27156 Neon Genesis Evangelion: The End of Evangelion...
0
1
     1178
                                        Paths of Glory (1957)
2
     1217
                                                   Ran (1985)
3
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
4
       930
                                             Notorious (1946)
                                  genres predicted_rating
0
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                4.382172
1
                               Drama|War
                                                  4.356297
2
                               Drama|War
                                                  4.326325
3
                             Crime|Drama
              Film-Noir|Romance|Thriller
Tops 5 Recommendations for User 58:
  movieId
                                                                  genres \
     3451 Guess Who's Coming to Dinner (1967)
0
                                                                  Drama
                                                              Drama|War
1
     2202
                                Lifeboat (1944)
2
                                     Ran (1985)
                                                              Drama|War
     1217
3
     1104
               Streetcar Named Desire, A (1951)
   106642
                 Day of the Doctor, The (2013) Adventure | Drama | Sci-Fi
  predicted_rating
0
           4.829288
           4.790941
1
           4.779787
2
3
           4.778867
           4.764232
Tops 5 Recommendations for User 59:
  movieId
                                                        title
                                                                     genres
     1104
                            Streetcar Named Desire, A (1951)
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
     1217
                                                   Ran (1985)
                                                                 Drama|War
```

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3
      2239 Swept Away (Travolti da un insolito destino ne... Comedy|Drama
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
   predicted rating
0
           5.000000
1
           4.968451
2
           4.929418
3
           4.913268
           4.896838
4
Tops 5 Recommendations for User 60:
   movieId
      3451
                          Guess Who's Coming to Dinner (1967)
1
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
      1104
                              Streetcar Named Desire, A (1951)
      2202
3
                                               Lifeboat (1944)
4
      4642
                              Hedwig and the Angry Inch (2000)
                 genres predicted rating
0
                  Drama
                                  4.480866
1
              Drama|War
                                  4.450687
2
                  Drama
                                 4.447467
3
              Drama|War
                                  4.438304
   Comedy|Drama|Musical
                                  4.430846
Tops 5 Recommendations for User 61:
   movieId
                                                          title \
Ω
     1104
                              Streetcar Named Desire, A (1951)
1
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
2
      1178
                                         Paths of Glory (1957)
3
     1217
                                                    Ran (1985)
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                        genres predicted rating
0
                                         4.621505
                         Drama
                                         4.597349
1
  Comedy|Crime|Drama|Thriller
2
                                         4.592007
                     Drama|War
3
                                         4.582684
                     Drama|War
4
                   Crime | Drama
                                         4.575553
Tops 5 Recommendations for User 62:
   movieId
                                                        title
                                                                    genres
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
1
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
2
      3451
                         Guess Who's Coming to Dinner (1967)
                                                                    Drama
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
3
     1104
                            Streetcar Named Desire, A (1951)
   predicted rating
0
           4.852305
1
           4.828450
2
           4.823611
3
           4.822032
           4.812514
Tops 5 Recommendations for User 63:
   movieId
                                                        title
                                                                     genres
                               Trial, The (Procès, Le) (1962)
0
      6460
    177593 Three Billboards Outside Ebbing, Missouri (2017)
1
                                                               Crime|Drama
2
      1178
                                        Paths of Glory (1957)
                                                                Drama|War
3
    142488
                                             Spotlight (2015)
                                                                   Thriller
      1104
                                                                      Drama
                             Streetcar Named Desire, A (1951)
   predicted rating
           4.403718
0
           4.381135
1
2
           4.333325
3
           4.330859
           4.316744
Tops 5 Recommendations for User 64:
  movieId
                                                         title \
```

```
177593
           Three Billboards Outside Ebbing, Missouri (2017)
1
2
     4642
                            Hedwig and the Angry Inch (2000)
3
      1104
                            Streetcar Named Desire, A (1951)
4
      2202
                                              Lifeboat (1944)
                 genres predicted_rating
0
                                 4.586671
              Drama|War
1
            Crime|Drama
                                 4.585290
2
  Comedy|Drama|Musical
                                 4.563062
3
                                 4.535787
                  Drama
4
              Drama|War
                                 4.525991
Tops 5 Recommendations for User 65:
  movieId
                                                        title
                                                                    genres
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      6460
                              Trial, The (Procès, Le) (1962)
                                                                     Drama
                            Streetcar Named Desire, A (1951)
2
      1104
                                                                     Drama
3
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
4
     1041
                                        Secrets & Lies (1996)
                                                                     Drama
  predicted rating
0
           4.599862
1
           4.588272
2
           4.577834
3
           4.558339
           4.548365
Tops 5 Recommendations for User 66:
  movieId
                                                        title
                                                                    genres \
0
      1104
                            Streetcar Named Desire, A (1951)
1
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
2
                                        Secrets & Lies (1996)
     1041
      1178
                                        Paths of Glory (1957)
3
                                                                 Drama|War
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
  predicted rating
0
           4.861446
           4.815965
1
2
           4.792004
3
           4.758900
           4.757871
Tops 5 Recommendations for User 67:
  movieId
                                                        title
                                                                       genres \
0
    1104
                            Streetcar Named Desire, A (1951)
                                                                        Drama
   177593 Three Billboards Outside Ebbing, Missouri (2017)
1
                                                                  Crime | Drama
2
     1041
                                        Secrets & Lies (1996)
                                                                        Drama
3
      1237
           Seventh Seal, The (Sjunde inseglet, Det) (1957)
      8477
                                             Jetée, La (1962) Romance | Sci-Fi
  predicted rating
0
           4.544786
           4.531231
1
2
           4.409735
3
           4.404411
           4.403927
Tops 5 Recommendations for User 68:
  movieId
                                                         title
                                                                      genres \
                          Guess Who's Coming to Dinner (1967)
0
     3451
                                                                       Drama
1
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
2
                                      Last Detail, The (1973) Comedy|Drama
      3200
3
            Seventh Seal, The (Sjunde inseglet, Det) (1957)
      1237
                                                                      Drama
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                                                  Drama|War
  predicted rating
0
           4.262203
1
           4.234525
2
           4.222716
3
           4.203103
4
           4.155767
```

Paths of Glory (1957)

0

1178

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Tops 5 Recommendations for User 69:
   movieId
                                                         title \
      2202
                                              Lifeboat (1944)
1
      1104
                             Streetcar Named Desire, A (1951)
2
      6791
                   Babette's Feast (Babettes gæstebud) (1987)
3
      1178
                                        Paths of Glory (1957)
     27156 Neon Genesis Evangelion: The End of Evangelion...
4
                                  genres predicted rating
0
                               Drama|War
                                                 5.000000
1
                                   Drama
                                                  4.950832
2
                                   Drama
                                                  4.945329
3
                               Drama|War
  Action | Animation | Drama | Fantasy | Sci-Fi
Tops 5 Recommendations for User 70:
  movieId
                                                         title \
0
     2202
                                              Lifeboat (1944)
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
3
    3451
                          Guess Who's Coming to Dinner (1967)
      1217
                                                    Ran (1985)
                                  genres predicted_rating
0
                               Drama|War
                                                  4.868990
1
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.824595
2
                             Crime|Drama
                                                  4.815454
3
                                   Drama
                                                  4.801371
4
                               Drama|War
                                                  4.799819
Tops 5 Recommendations for User 71:
  movieId
                                                         title \
   106642
0
                                Day of the Doctor, The (2013)
1
     6100
                       Midsummer Night's Sex Comedy, A (1982)
2
      3451
                          Guess Who's Coming to Dinner (1967)
3
      7121
                                            Adam's Rib (1949)
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
4
                   genres predicted rating
0
  Adventure|Drama|Sci-Fi
                                 4.513434
1
           Comedy|Romance
                                   4.463139
2
                    Drama
                                   4.453778
3
           Comedy|Romance
                                   4.450119
4
            Drama|Romance
                                   4.430232
Tops 5 Recommendations for User 72:
  movieId
                                                         title \
0
     2202
                                              Lifeboat (1944)
1
     1178
                                        Paths of Glory (1957)
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
3
                             Streetcar Named Desire, A (1951)
      6791
                  Babette's Feast (Babettes gæstebud) (1987)
                        genres predicted rating
0
                     Drama|War
                                        4.888362
1
                     Drama|War
                                        4.784526
2
   Comedy|Crime|Drama|Thriller
                                        4.765208
3
                                        4.727823
                         Drama
4
                         Drama
Tops 5 Recommendations for User 73:
  movieId
                                                         title \
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
1
      2202
                                               Lifeboat (1944)
2
     6460
                               Trial, The (Procès, Le) (1962)
     1223 Grand Day Out with Wallace and Gromit, A (1989)
3
    27156 Neon Genesis Evangelion: The End of Evangelion...
                                       genres predicted rating
0
                                  Crime|Drama
                                                       4.652950
1
                                    Drama|War
                                                       4.584209
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Adventure | Animation | Children | Comedy | Sci-Fi
                                                      4.555911
       Action|Animation|Drama|Fantasy|Sci-Fi
                                                      4.553230
Tops 5 Recommendations for User 74:
  movieId
                                                       title \
    27156 Neon Genesis Evangelion: The End of Evangelion...
0
     1104
                            Streetcar Named Desire, A (1951)
1
2
   177593 Three Billboards Outside Ebbing, Missouri (2017)
3
     1178
                                       Paths of Glory (1957)
     2202
4
                                             Lifeboat (1944)
                                 genres predicted rating
  Action|Animation|Drama|Fantasy|Sci-Fi
1
                                  Drama
2
                            Crime|Drama
                                                 4.843749
3
                               Drama|War
                                                 4.837965
4
                               Drama|War
                                                 4.773543
Tops 5 Recommendations for User 75:
  movieId
                                                        title \
           Three Billboards Outside Ebbing, Missouri (2017)
0
   177593
1
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
     58559
                                     Dark Knight, The (2008)
3
      930
                                            Notorious (1946)
     3451
4
                         Guess Who's Coming to Dinner (1967)
                      genres predicted_rating
0
                 Crime|Drama
                                     4.347496
1
                Drama|Romance
                                      4.229387
2
     Action|Crime|Drama|IMAX
                                     4.135327
 Film-Noir|Romance|Thriller
                                     4.118528
                       Drama
                                     4.111211
Tops 5 Recommendations for User 76:
  movieId
                                                       title \
     3266 Man Bites Dog (C'est arrivé près de chez vous)...
0
            Seventh Seal, The (Sjunde inseglet, Det) (1957)
1
     1237
2
     2202
                                             Lifeboat (1944)
3
    65642
                      Timecrimes (Cronocrimenes, Los) (2007)
4
     2300
                                       Producers, The (1968)
                       genres predicted rating
0
  Comedy|Crime|Drama|Thriller
                                       3.878139
1
                        Drama
                                       3.798007
2
                    Drama|War
                                       3.785336
3
                                       3.771589
              Sci-Fi|Thriller
                       Comedy
                                       3.765711
Tops 5 Recommendations for User 77:
                                         title
  movieId
                                                                 genres \
    51931
                          Reign Over Me (2007)
                                                                 Drama
1
    87234
                              Submarine (2010) Comedy|Drama|Romance
2
     3451 Guess Who's Coming to Dinner (1967)
           Day of the Doctor, The (2013) Adventure|Drama|Sci-Fi
3
   106642
                        White Christmas (1954) Comedy|Musical|Romance
     3675
  predicted rating
0
          4.718814
1
           4.628971
2
           4.585720
           4.546679
3
           4.543432
Tops 5 Recommendations for User 78:
  movieId
                                                        title \
0
    1223
            Grand Day Out with Wallace and Gromit, A (1989)
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                                       Paths of Glory (1957)
3
    27156 Neon Genesis Evangelion: The End of Evangelion...
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
```

Drama

4.573250

2

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Adventure | Animation | Children | Comedy | Sci-Fi
                                                        4.148557
1
                                  Crime|Drama
                                                        4.106223
2
                                    Drama|War
                                                        4.059654
3
       Action|Animation|Drama|Fantasy|Sci-Fi
                                                        4.059301
                                Drama|Romance
                                                        4.055352
Tops 5 Recommendations for User 79:
  movieId
                                                        title \
0
     3451
                         Guess Who's Coming to Dinner (1967)
   177593 Three Billboards Outside Ebbing, Missouri (2017)
1
2
      933
                                     To Catch a Thief (1955)
3
      1104
                            Streetcar Named Desire, A (1951)
     1272
                                                Patton (1970)
                           genres predicted rating
0
                            Drama
                                            4.833564
1
                      Crime|Drama
                                            4.818089
2
  Crime|Mystery|Romance|Thriller
                                           4.754044
3
                                            4.734718
                            Drama
                        Drama|War
                                            4.717205
Tops 5 Recommendations for User 80:
                                                                     genres \
  movieId
                                                        title
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                                                               Drama|War
1
      2202
                                              Lifeboat (1944)
2
      1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
3
      3200
                                     Last Detail, The (1973) Comedy|Drama
     1178
                                        Paths of Glory (1957)
                                                              Drama|War
  predicted rating
           4.979140
           4.969618
1
2
           4.964407
3
           4.963386
           4.937508
4
Tops 5 Recommendations for User 81:
  movieId
                                                         title
                                                                       genres
   177593
            Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                  Crime|Drama
1
      1041
                                        Secrets & Lies (1996)
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
2
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1104
                             Streetcar Named Desire, A (1951)
                                                                         Drama
  predicted rating
0
           3.813482
1
           3.802504
2
           3.788939
3
           3.784158
           3.777742
Tops 5 Recommendations for User 82:
  movieId
                                                         title
                                                                       genres \
0
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
                                              Spotlight (2015)
1
   142488
                                                                     Thriller
           Three Billboards Outside Ebbing, Missouri (2017)
   177593
                                                                  Crime|Drama
3
                                       Last Detail, The (1973)
      3200
                                                                 Comedy | Drama
4
      3341
                                         Born Yesterday (1950)
  predicted rating
0
           4.502701
           4.421209
1
2
           4.416353
3
           4.401779
           4.379844
Tops 5 Recommendations for User 83:
  movieId
      3083 All About My Mother (Todo sobre mi madre) (1999)
1
       930
                                             Notorious (1946)
2
       899
                                  Singin' in the Rain (1952)
```

genres predicted rating

```
3
     26810
                                         Bad Boy Bubby (1993)
      912
                                           Casablanca (1942)
                       genres predicted rating
0
                        Drama
                                       4.287835
  Film-Noir|Romance|Thriller
1
                                        4.209337
2
      Comedy|Musical|Romance
                                        4.140905
3
                        Drama
                                       4.139864
4
                                        4.135901
                Drama|Romance
Tops 5 Recommendations for User 84:
  movieId
                                                        title
                                                                    genres
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
1
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
                         Guess Who's Coming to Dinner (1967)
      3451
                                                                     Drama
3
           Seventh Seal, The (Sjunde inseglet, Det) (1957)
                                                                    Drama
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
  predicted rating
0
           4.513977
1
           4.471072
2
           4.418640
3
           4.401019
           4.391911
Tops 5 Recommendations for User 85:
  movieId
                                           title
                                                                genres \
Ω
     2202
                                 Lifeboat (1944)
                                                             Drama|War
1
      1250 Bridge on the River Kwai, The (1957) Adventure|Drama|War
      1203
                             12 Angry Men (1957)
                                                                 Drama
3
     8477
                                Jetée, La (1962)
                                                       Romance|Sci-Fi
     93838
                    The Raid: Redemption (2011)
                                                         Action|Crime
  predicted rating
0
           4.612106
           4.572646
1
2
           4.533322
3
           4.529257
           4.525069
4
Tops 5 Recommendations for User 86:
  movieId
                                                        title
                                                                    genres
      6460
                              Trial, The (Procès, Le) (1962)
                                                                     Drama
1
      1104
                            Streetcar Named Desire, A (1951)
                                                                     Drama
2
     2202
                                             Lifeboat (1944)
                                                                Drama|War
3
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
     1178
                                       Paths of Glory (1957)
                                                                Drama|War
  predicted rating
           4.624287
1
           4.569520
2
           4.549708
3
           4.545391
           4.540472
Tops 5 Recommendations for User 87:
                                                         title \
  movieId
0
      2202
                                              Lifeboat (1944)
     27156 Neon Genesis Evangelion: The End of Evangelion...
1
           Three Billboards Outside Ebbing, Missouri (2017)
2
    177593
3
                                         Paths of Glory (1957)
     1178
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                  genres predicted rating
0
                                                  4.848159
                               Drama|War
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.703323
2
                             Crime|Drama
                                                   4.684379
3
                               Drama|War
                                                   4.683007
                               Drama|War
                                                   4.674741
Tops 5 Recommendations for User 88:
  movieId
                                                         title \
```

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0
     1178
                                       Paths of Glory (1957)
1
     2202
                                             Lifeboat (1944)
2
    27156
           Neon Genesis Evangelion: The End of Evangelion...
3
      750
           Dr. Strangelove or: How I Learned to Stop Worr...
     2571
                                          Matrix, The (1999)
                                 genres predicted_rating
0
                              Drama|War 4.767125
1
                              Drama|War
                                                4.747940
2
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                4.700196
3
                             Comedy|War
                                                4.681738
4
                 Action|Sci-Fi|Thriller
Tops 5 Recommendations for User 89:
  movieId
                                                       title \
     8477
                                            Jetée, La (1962)
1
     2571
                                          Matrix, The (1999)
2
     3429
                                    Creature Comforts (1989)
3
           Seventh Seal, The (Sjunde inseglet, Det) (1957)
     1237
     3266 Man Bites Dog (C'est arrivé près de chez vous)...
                       genres predicted rating
0
               Romance|Sci-Fi
                                       4.415774
1
       Action|Sci-Fi|Thriller
                                       4.374856
             Animation|Comedy
2
                                       4.355556
                                       4.349388
3
                        Drama
  Comedy|Crime|Drama|Thriller
                                       4.339232
Tops 5 Recommendations for User 90:
  movieId
                            title
                                            genres predicted rating
0
     1217
                       Ran (1985)
                                          Drama|War
                                                             4.798233
1
      246
               Hoop Dreams (1994)
                                        Documentary
                                                             4.777582
2
      904
               Rear Window (1954) Mystery|Thriller
                                                             4.774467
                                    Drama|War
3
     1178
            Paths of Glory (1957)
                                                             4.760446
      527 Schindler's List (1993)
                                          Drama|War
                                                              4.746904
Tops 5 Recommendations for User 91:
  movieId
   177593
            Three Billboards Outside Ebbing, Missouri (2017)
0
     3266 Man Bites Dog (C'est arrivé près de chez vous)...
1
2
     1217
                                                  Ran (1985)
3
     2202
                                             Lifeboat (1944)
4
     6460
                              Trial, The (Procès, Le) (1962)
                       genres predicted rating
0
                  Crime|Drama 4.324213
1
  Comedy|Crime|Drama|Thriller
                                       4.321848
2
                    Drama|War
                                       4.291647
3
                    Drama|War
                                       4.267693
                        Drama
                                       4.255286
Tops 5 Recommendations for User 92:
  movieId
   177593
0
          Three Billboards Outside Ebbing, Missouri (2017)
1
    1104
                            Streetcar Named Desire, A (1951)
2
   171495
3
                         Guess Who's Coming to Dinner (1967)
     3451
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
              genres predicted_rating
0
         Crime|Drama
                              4.663055
1
                              4.660282
               Drama
2
   (no genres listed)
                              4.654856
3
               Drama
                              4.643457
4
           Drama|War
                              4.619676
Tops 5 Recommendations for User 93:
  movieId
                                  title
                                                                 genres \
      246
                     Hoop Dreams (1994)
                                                            Documentary
1
      905 It Happened One Night (1934)
                                                         Comedy|Romance
2
      930
                       Notorious (1946)
                                            Film-Noir|Romance|Thriller
3
      933
               To Catch a Thief (1955) Crime|Mystery|Romance|Thriller
```

```
predicted rating
0
1
                  5
2
                  5
                  5
3
4
                  5
Tops 5 Recommendations for User 94:
   movieId
                                                          title \
    106642
                                 Day of the Doctor, The (2013)
1
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
2
      8132
                                               Gladiator (1992)
3
    142488
                                               Spotlight (2015)
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                   genres predicted rating
                                    3.997893
   Adventure|Drama|Sci-Fi
                                    3.977517
1
            Drama|Romance
2
             Action|Drama
                                    3.974677
3
                 Thriller
                                    3.920073
                Drama|War
                                    3.911134
Tops 5 Recommendations for User 95:
   movieId
                                                          title
                                                                     genres \
      1178
0
                                          Paths of Glory (1957) Drama|War
      1217
1
                                                     Ran (1985)
                                                                  Drama|War
2
      2202
                                                Lifeboat (1944)
                                                                  Drama|War
3
      1104
                              Streetcar Named Desire, A (1951)
                                                                      Drama
     43376 Sophie Scholl: The Final Days (Sophie Scholl -... Drama|War
   predicted rating
0
           4.871350
           4.796116
1
2
           4.782361
3
           4.781128
           4.769328
4
Tops 5 Recommendations for User 96:
   movieId
                                                          title
      2202
                                                Lifeboat (1944)
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
       720 Wallace & Gromit: The Best of Aardman Animatio...
3
      5500
                                             Top Secret! (1984)
4
       969
                                     African Queen, The (1951)
                                   genres predicted rating
0
                                Drama|War
                                                    4.892924
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.833424
2
              Adventure | Animation | Comedy
                                                    4.745721
3
                                   Comedy
                                                    4.720161
            Adventure | Comedy | Romance | War
                                                    4.713457
Tops 5 Recommendations for User 97:
   movieId
0
     1104
                             Streetcar Named Desire, A (1951)
1
      6460
                               Trial, The (Procès, Le) (1962)
2
     54190
                                   Across the Universe (2007)
                                Day of the Doctor, The (2013)
3
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                           genres predicted rating
0
                            Drama
                                                   5
                                                   5
1
                            Drama
                                                   5
2
   Drama|Fantasy|Musical|Romance
                                                   5
3
         Adventure|Drama|Sci-Fi
                      Crime|Drama
Tops 5 Recommendations for User 98:
   movieId
                                            title
                                                           genres
      3451 Guess Who's Coming to Dinner (1967)
                                                            Drama
```

1041

Secrets & Lies (1996)

Drama

```
1
               Streetcar Named Desire, A (1951)
      1104
2
                          Secrets & Lies (1996)
      1041
                                                           Drama
3
      3200
                        Last Detail, The (1973)
                                                  Comedy|Drama
4
      8477
                               Jetée, La (1962) Romance | Sci-Fi
   predicted_rating
0
           4.704115
1
           4.681204
2
           4.676666
3
           4.630490
           4.625155
Tops 5 Recommendations for User 99:
  movieId
       246
                                   Hoop Dreams (1994)
       260 Star Wars: Episode IV - A New Hope (1977)
1
2
      1104
                    Streetcar Named Desire, A (1951)
3
      1217
                                            Ran (1985)
                                  Touch of Evil (1958)
      1248
                     genres predicted rating
0
                Documentary
1
   Action|Adventure|Sci-Fi
2
                                             5
                      Drama
                                             5
3
                  Drama|War
  Crime|Film-Noir|Thriller
Tops 5 Recommendations for User 100:
  movieId
                                                         title
                                                                       genres \
                                       Last Detail, The (1973) Comedy|Drama
0
     3200
1
      1104
                              Streetcar Named Desire, A (1951)
      3451
                          Guess Who's Coming to Dinner (1967)
3
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
                                              Lifeboat (1944)
      2202
                                                                    Drama|War
   predicted rating
           4.780957
0
           4.704301
1
2
           4.692475
3
           4.652302
           4.645981
Tops 5 Recommendations for User 101:
  movieId
                                                        title \
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
1
     1178
                                        Paths of Glory (1957)
2
      1272
                                                Patton (1970)
3
      5915
                   Victory (a.k.a. Escape to Victory) (1981)
      527
                                     Schindler's List (1993)
             genres predicted rating
        Crime|Drama
                             4.489534
1
          Drama|War
                             4.465885
                             4.453765
          Drama|War
  Action|Drama|War
                             4.433409
          Drama|War
                             4.413282
Tops 5 Recommendations for User 102:
   movieId
                                                        title
                                                                    genres \
0
      1178
                                        Paths of Glory (1957)
                                                                Drama|War
      3019
1
                                      Drugstore Cowboy (1989)
                                                               Crime|Drama
2
     2202
                                              Lifeboat (1944)
                                                               Drama|War
3
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                              Crime|Drama
      246
                                           Hoop Dreams (1994) Documentary
   predicted rating
0
           4.349431
1
           4.301841
2
           4.297773
3
           4.291630
           4.289102
```

Drama

```
Tops 5 Recommendations for User 103:
   movieId
                                                          title
0
      1178
                                         Paths of Glory (1957)
                                                                   Drama|War
1
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                 Crime|Drama
2
      1217
                                                    Ran (1985)
                                                                  Drama|War
3
                               Trial, The (Procès, Le) (1962)
      6460
                                                                       Drama
4
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
   predicted_rating
0
           4.714882
1
           4.695456
2
           4.682237
3
           4.640681
           4.628771
Tops 5 Recommendations for User 104:
   movieId
                                                          title
                                                                       genres \
                             Streetcar Named Desire, A (1951)
0
      1104
                                                                       Drama
1
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
2
                                         Paths of Glory (1957)
      1178
                                                                   Drama|War
    3451 Guess Who's Coming to Dinner (1967) Drama
177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
3
   predicted rating
0
           4.517184
1
           4.451003
2
           4.414792
3
           4.388525
           4.379952
Tops 5 Recommendations for User 105:
   movieId
                                                           title \
      2202
                                                Lifeboat (1944)
      1104
1
                              Streetcar Named Desire, A (1951)
2
      1041
                                          Secrets & Lies (1996)
            Three Billboards Outside Ebbing, Missouri (2017)
3
   177593
     27156 Neon Genesis Evangelion: The End of Evangelion...
4
                                    genres predicted rating
0
                                 Drama|War
                                                    4.764924
1
                                     Drama
                                                     4.745719
2
                                     Drama
                                                     4.719629
3
                              Crime|Drama
                                                     4.712930
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                     4.690367
Tops 5 Recommendations for User 106:
   movieId
                                                       genres predicted rating
                                         title
0
     1104 Streetcar Named Desire, A (1951)
                                                       Drama
                                                                               5
1
      1178
                       Paths of Glory (1957)
                                                   Drama|War
                                                                               5
2
      1217
                                    Ran (1985)
                                                   Drama|War
                                                                               5
3
      2202
                              Lifeboat (1944)
                                                    Drama|War
                      Last Detail, The (1973) Comedy|Drama
Tops 5 Recommendations for User 107:
   movieId
                                                          title
                                                                        genres \
Λ
      2202
                                               Lifeboat (1944)
                                                                     Drama|War
                                       Last Detail, The (1973)
1
      3200
                                                                Comedy|Drama
    177593 Three Billboards Outside Ebbing, Missouri (2017)
2
                                                                  Crime|Drama
3
      1104
                             Streetcar Named Desire, A (1951)
                                                                         Drama
      1217
                                                     Ran (1985)
                                                                    Drama|War
   predicted_rating
           4.989881
0
           4.870784
1
2
           4.846903
3
           4.844046
           4.812778
Tops 5 Recommendations for User 108:
   movieId
                                                           title \
      2202
                                                Lifeboat (1944)
1
      1178
                                          Paths of Glory (1957)
```

```
2
     1041
                                         Secrets & Lies (1996)
3
     27156 Neon Genesis Evangelion: The End of Evangelion...
4
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                  genres predicted_rating
0
                               Drama|War
                                                   4.848428
1
                               Drama|War
                                                   4.824250
2
                                                   4.792137
                                   Drama
3
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.749625
4
                             Crime|Drama
                                                   4.724088
Tops 5 Recommendations for User 109:
  movieId
                                                         title \
     2202
                                               Lifeboat (1944)
     1104
1
                             Streetcar Named Desire, A (1951)
2
     3266 Man Bites Dog (C'est arrivé près de chez vous)...
3
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
4
     1248
                                          Touch of Evil (1958)
                        genres predicted rating
0
                     Drama|War
                                        4.310020
1
                         Drama
                                        4.185720
2
  Comedy | Crime | Drama | Thriller
                                        4.165079
3
                   Crime|Drama
                                        4.129438
4
     Crime|Film-Noir|Thriller
                                        4.125259
Tops 5 Recommendations for User 110:
  movieId
                                                         title \
0
     2202
                                               Lifeboat (1944)
1
     6460
                               Trial, The (Procès, Le) (1962)
2
     1104
                             Streetcar Named Desire, A (1951)
3
  177593
           Three Billboards Outside Ebbing, Missouri (2017)
   27156 Neon Genesis Evangelion: The End of Evangelion...
                                  genres predicted rating
0
                                                  4.545514
                               Drama|War
1
                                                   4.509696
                                   Drama
2
                                                   4.487101
                                   Drama
3
                             Crime | Drama
                                                   4.478081
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.464577
Tops 5 Recommendations for User 111:
  movieId
                                                        title \
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
    26810
                                        Bad Boy Bubby (1993)
1
2
     4642
                            Hedwig and the Angry Inch (2000)
3
    51931
                                        Reign Over Me (2007)
     1104
                            Streetcar Named Desire, A (1951)
4
                 genres predicted rating
0
            Crime|Drama
                                 4.379690
1
                  Drama
                                 4.331486
2
  Comedy|Drama|Musical
                                 4.322445
3
                  Drama
                                 4.318389
4
                  Drama
                                 4.306083
Tops 5 Recommendations for User 112:
  movieId
                                                         title \
0
    51931
                                         Reign Over Me (2007)
     27156 Neon Genesis Evangelion: The End of Evangelion...
1
2
      3019
                                       Drugstore Cowboy (1989)
3
      741
                   Ghost in the Shell (Kôkaku kidôtai) (1995)
                       Timecrimes (Cronocrímenes, Los) (2007)
     65642
4
                                  genres predicted_rating
0
                                   Drama
                                                  4.565132
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.501618
2
                             Crime|Drama
                                                   4.479294
3
                        Animation|Sci-Fi
                                                   4.462552
4
                         Sci-Fi|Thriller
                                                   4.420954
```

Tops 5 Recommendations for User 113:

```
movieId
                                                       title
                                                                   genres
0
     6460
                              Trial, The (Procès, Le) (1962)
                                                                    Drama
1
     26810
                                        Bad Boy Bubby (1993)
                                                                    Drama
2
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
3
                           Celebration, The (Festen) (1998) Drama
      2360
      1949
                               Man for All Seasons, A (1966)
   predicted rating
0
          4.638267
1
           4.616579
2
           4.607970
3
           4.582480
           4.526811
Tops 5 Recommendations for User 114:
  movieId
                                                        title
                                                                     genres \
   177593
           Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                                Drama|War
1
    43376 Sophie Scholl: The Final Days (Sophie Scholl -...
2
                             Streetcar Named Desire, A (1951)
     1104
                                           Hoop Dreams (1994)
                                                              Documentary
3
      246
                                             Gladiator (1992) Action|Drama
      8132
   predicted_rating
0
          4.259761
1
           4.257801
           4.208041
2
3
           4.186333
           4.158017
Tops 5 Recommendations for User 115:
  movieId
                                                        title \
0
    1178
                                        Paths of Glory (1957)
   177593 Three Billboards Outside Ebbing, Missouri (2017)
1
2
     1250
                        Bridge on the River Kwai, The (1957)
3
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
     1104
                             Streetcar Named Desire, A (1951)
4
                genres predicted rating
0
                               4.792869
             Drama|War
1
          Crime|Drama
                                4.719475
2
  Adventure|Drama|War
                                4.719030
3
        Drama|Romance
                                4.651752
4
                 Drama
                                4.645639
Tops 5 Recommendations for User 116:
  movieId
                                                        title \
0
    43376 Sophie Scholl: The Final Days (Sophie Scholl -...
     8132
1
                                             Gladiator (1992)
2
   106642
                                Day of the Doctor, The (2013)
3
     3451
                          Guess Who's Coming to Dinner (1967)
      2202
                                              Lifeboat (1944)
                   genres predicted rating
0
                                   4.367252
                Drama|War
             Action|Drama
1
                                   4.360063
  Adventure|Drama|Sci-Fi
                                   4.317934
3
                                   4.294740
                    Drama
                Drama|War
                                   4.258544
Tops 5 Recommendations for User 117:
  movieId
                                                       title
                                                                   genres \
0
     2202
                                            Lifeboat (1944)
                                                                 Drama|War
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
2
                                                                Drama|War
     1178
                                       Paths of Glory (1957)
3
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                             Crime|Drama
     3200
                                     Last Detail, The (1973) Comedy|Drama
  predicted rating
          4.311883
1
           4.290108
2
           4.272124
3
           4.266276
```

```
4
           4.249394
Tops 5 Recommendations for User 118:
  movieId
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
     2360
                            Celebration, The (Festen) (1998)
1
2
     1178
                                       Paths of Glory (1957)
3
    51931
                                        Reign Over Me (2007)
4
     3836
                                       Kelly's Heroes (1970)
              genres predicted rating
0
         Crime|Drama
                             4.427462
1
              Drama
                              4.394224
2
           Drama|War
                              4.384433
3
              Drama
                              4.353297
  Action|Comedy|War
                              4.346933
Tops 5 Recommendations for User 119:
  movieId
                                                       title
                                                                    genres \
                                                               Drama|War
0
     2202
                                             Lifeboat (1944)
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
2
                         Guess Who's Coming to Dinner (1967)
     3451
3
     1104
                            Streetcar Named Desire, A (1951)
                                                                     Drama
     1217
                                                  Ran (1985)
                                                               Drama|War
  predicted_rating
0
           4.948903
1
           4.910566
2
           4.906925
3
           4.904607
           4.847663
Tops 5 Recommendations for User 120:
  movieId
                                                         title \
     1178
                                        Paths of Glory (1957)
    27156 Neon Genesis Evangelion: The End of Evangelion...
1
2
     1104
                             Streetcar Named Desire, A (1951)
      527
                                      Schindler's List (1993)
3
      912
                                            Casablanca (1942)
4
                                  genres predicted_rating
                               Drama|War
                                                  4.633238
  Action|Animation|Drama|Fantasy|Sci-Fi
1
                                                  4.530341
2
                                                  4.485421
                                   Drama
3
                                                  4.447343
                               Drama|War
                                                  4.407730
4
                           Drama|Romance
Tops 5 Recommendations for User 121:
  movieId
                                       title
                                                     genres predicted rating
     2202
                             Lifeboat (1944)
                                                   Drama|War
                                                                      4.317358
     1104 Streetcar Named Desire, A (1951)
                                                                      4.228390
                                                    Drama
                       Paths of Glory (1957)
     1178
                                                   Drama|War
                                                                      4.201221
3
     8477
                            Jetée, La (1962) Romance|Sci-Fi
                                                                      4.182452
     6460
           Trial, The (Procès, Le) (1962)
                                                       Drama
                                                                      4.173125
Tops 5 Recommendations for User 122:
  movieId
                                                        title \
0
       246
                                           Hoop Dreams (1994)
1
       741
                   Ghost in the Shell (Kôkaku kidôtai) (1995)
2
       750 Dr. Strangelove or: How I Learned to Stop Worr...
3
       904
                                           Rear Window (1954)
      930
4
                                             Notorious (1946)
                       genres predicted rating
0
                  Documentary
                                              5
                                              5
1
             Animation|Sci-Fi
                                              5
2
                   Comedy|War
                                              5
3
             Mystery|Thriller
  Film-Noir|Romance|Thriller
Tops 5 Recommendations for User 123:
  movieId
                                                        title
                                                                    genres \
```

```
177593 Three Billboards Outside Ebbing, Missouri (2017)
1
      1041
                                        Secrets & Lies (1996)
                                                                       Drama
2
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      3200
                                      Last Detail, The (1973)
                                                               Comedy|Drama
   predicted_rating
           4.580604
0
1
           4.551805
2
           4.539407
3
           4.536850
           4.500677
Tops 5 Recommendations for User 124:
   movieId
                                                          title \
                                               Lifeboat (1944)
      2202
1
      1217
                                                     Ran (1985)
2
      1178
                                         Paths of Glory (1957)
3
      1104
                              Streetcar Named Desire, A (1951)
      720 Wallace & Gromit: The Best of Aardman Animatio...
4
                        genres predicted rating
0
                    Drama|War
                                        4.734419
1
                    Drama|War
                                        4.673596
2
                    Drama|War
                                        4.629168
3
                         Drama
                                        4.614698
  Adventure | Animation | Comedy
                                        4.582136
Tops 5 Recommendations for User 125:
   movieId
                                                          title
                                                                    genres \
0
      2202
                                               Lifeboat (1944) Drama|War
1
      1217
                                                     Ran (1985) Drama|War
2
      6460
                                Trial, The (Procès, Le) (1962)
                                                                     Drama
3
      1104
                              Streetcar Named Desire, A (1951)
                                                                     Drama
     43376 Sophie Scholl: The Final Days (Sophie Scholl -... Drama|War
   predicted rating
0
           4.643640
           4.629032
1
2
           4.602826
3
           4.564545
           4.529991
Tops 5 Recommendations for User 126:
  movieId
                                                          title \
0
     2202
                                               Lifeboat (1944)
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
     87234
                                              Submarine (2010)
3
    177593
            Three Billboards Outside Ebbing, Missouri (2017)
      3200
                                       Last Detail, The (1973)
                                   genres predicted rating
0
                                Drama|War
                                                   4.510106
  Action|Animation|Drama|Fantasy|Sci-Fi
1
                                                    4.337106
2
                    Comedy|Drama|Romance
                                                   4.295198
3
                              Crime|Drama
                                                    4.258406
4
                             Comedy|Drama
                                                    4.213018
Tops 5 Recommendations for User 127:
   movieId
                                                          title
                                                                        genres \
             Three Billboards Outside Ebbing, Missouri (2017)
    177593
0
                                                                   Crime|Drama
1
      1104
                              Streetcar Named Desire, A (1951)
2
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
3
      3451
                          Guess Who's Coming to Dinner (1967)
4
      2318
                                              Happiness (1998)
                                                                 Comedy|Drama
   predicted rating
0
           4.324099
1
           4.173266
2
           4.101654
3
           4.099078
4
           4.057963
```

Crime|Drama

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Tops 5 Recommendations for User 128:
  movieId
                                          title
                                                       genres
     1178
                         Paths of Glory (1957)
                                                    Drama|War
1
      1104
              Streetcar Named Desire, A (1951)
                                                       Drama
2
                       Last Detail, The (1973) Comedy|Drama
      3200
3
      3451 Guess Who's Coming to Dinner (1967)
4
     5500
                            Top Secret! (1984)
                                                      Comedy
  predicted_rating
0
           4.691167
1
           4.684220
2
           4.647073
3
           4.642888
           4.630846
Tops 5 Recommendations for User 129:
                                                        title \
  movieId
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
0
    43376 Sophie Scholl: The Final Days (Sophie Scholl -...
1
                                Day of the Doctor, The (2013)
2
   106642
3
    1104
                             Streetcar Named Desire, A (1951)
     1217
                                                   Ran (1985)
                   genres predicted_rating
              Crime|Drama
0
                                  4.653497
1
                Drama|War
                                   4.621532
                                   4.586664
  Adventure|Drama|Sci-Fi
3
                   Drama
                                   4.574297
4
                Drama|War
                                   4.573269
Tops 5 Recommendations for User 130:
  movieId
                                                        title
                                                                      genres
            Three Billboards Outside Ebbing, Missouri (2017)
0
   177593
                                                                Crime|Drama
    40491 Match Factory Girl, The (Tulitikkutehtaan tytt...
                                                               Comedy|Drama
1
2
                            Streetcar Named Desire, A (1951)
     1104
3
                          Autumn Sonata (Höstsonaten) (1978)
     2131
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
4
  predicted rating
0
           4.514109
1
           4.457035
2
           4.345032
3
           4.331665
           4.325586
4
Tops 5 Recommendations for User 131:
  movieId
                                                       title \
0
   177593 Three Billboards Outside Ebbing, Missouri (2017)
1
     1248
                                        Touch of Evil (1958)
2
     1217
                                                 Ran (1985)
3
     6460
                              Trial, The (Procès, Le) (1962)
     1178
                                       Paths of Glory (1957)
                     genres predicted rating
0
                Crime|Drama
                                     4.033101
  Crime|Film-Noir|Thriller
1
                                     4.010003
2
                  Drama|War
                                     3.969637
3
                      Drama
                                     3.969461
                  Drama|War
Tops 5 Recommendations for User 132:
  movieId
                                                       title
                                                                   genres \
0
     1104
                            Streetcar Named Desire, A (1951)
                                                                    Drama
     1178
                                       Paths of Glory (1957)
1
                                                               Drama|War
2
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
3
     1041
                                       Secrets & Lies (1996)
     2202
                                             Lifeboat (1944)
                                                               Drama|War
  predicted rating
0
           3.867605
           3.819552
1
```

```
3
           3.799281
4
           3.784365
Tops 5 Recommendations for User 133:
   movieId
                                                         title \
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
0
                             Streetcar Named Desire, A (1951)
      1104
1
                                      Last Detail, The (1973)
2
      3200
3
                                         Paths of Glory (1957)
      1178
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
4
                        genres predicted rating
0
                   Crime|Drama
                                         3.896487
1
                         Drama
                                         3.853811
2
                  Comedy | Drama
                                         3.794098
3
                     Drama|War
                                         3.785733
   Comedy|Crime|Drama|Thriller
                                         3.752192
Tops 5 Recommendations for User 134:
   movieId
                                                        title
    177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                                                               Crime|Drama
                                        Paths of Glory (1957)
1
      1178
                                                                Drama|War
                            Streetcar Named Desire, A (1951)
2
      1104
                                                                      Drama
3
      318
                            Shawshank Redemption, The (1994) Crime|Drama
4
      3451
                         Guess Who's Coming to Dinner (1967)
   predicted_rating
0
           4.545926
1
           4.538796
2
           4.511657
3
           4.480287
           4.467068
Tops 5 Recommendations for User 135:
   movieId
                                                         title \
      2202
\cap
                                               Lifeboat (1944)
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
1
2
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
    177593
            Three Billboards Outside Ebbing, Missouri (2017)
      750 Dr. Strangelove or: How I Learned to Stop Worr...
                                   genres predicted_rating
0
                                                  4.793709
                                Drama|War
1
             Comedy|Crime|Drama|Thriller
                                                   4.656933
2
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.624560
3
                              Crime|Drama
                                                   4.619142
4
                                                   4.587044
                               Comedy|War
Tops 5 Recommendations for User 136:
   movieId
                                                         title
                                                                       genres
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
                                         Paths of Glory (1957)
1
      1178
                                                                    DramalWar
2
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                  Crime | Drama
3
     2202
                                               Lifeboat (1944)
                                                                     Drama|War
     92259
                                           Intouchables (2011)
                                                                Comedy|Drama
   predicted rating
0
           4.604502
1
           4.572359
2
           4.508281
3
           4.473826
           4.464311
Tops 5 Recommendations for User 137:
   movieId
                                                        title
0
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      6460
                              Trial, The (Procès, Le) (1962)
2
      1217
                                                   Ran (1985)
                                                                 Drama|War
3
      1104
                            Streetcar Named Desire, A (1951)
                                                                     Drama
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
```

3.801037

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predicted_rating
0
           4.577169
1
           4.559105
2
           4.545952
3
           4.541453
           4.537517
Tops 5 Recommendations for User 138:
  movieId
                                                        title \
    177593 Three Billboards Outside Ebbing, Missouri (2017)
0
1
     1178
                                        Paths of Glory (1957)
2
      1104
                            Streetcar Named Desire, A (1951)
3
      8477
                                             Jetée, La (1962)
      5915
                   Victory (a.k.a. Escape to Victory) (1981)
             genres predicted rating
0
        Crime|Drama
                              4.720641
                              4.560740
1
          Drama|War
2
                              4.552212
              Drama
3
     Romance|Sci-Fi
                              4.539375
  Action|Drama|War
                              4.530592
Tops 5 Recommendations for User 139:
  movieId
                                                         title \
0
      3451
                          Guess Who's Coming to Dinner (1967)
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
      2202
                                               Lifeboat (1944)
3
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
      8477
                                              Jetée, La (1962)
                                   genres predicted rating
0
                                    Drama
1
  Action | Animation | Drama | Fantasy | Sci-Fi
                                                   3.148441
                                Drama|War
                                                   3.148198
3
             Comedy|Crime|Drama|Thriller
                                                   3.144718
4
                                                   3.138359
                          Romance|Sci-Fi
Tops 5 Recommendations for User 140:
  movieId
                                                         title
                                                                     genres
     1104
0
                            Streetcar Named Desire, A (1951)
                                                                     Drama
1
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
                                                               Crime|Drama
2
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                        Paths of Glory (1957)
3
      1178
                                                               Drama|War
      6791
                  Babette's Feast (Babettes gæstebud) (1987)
                                                                      Drama
  predicted_rating
0
           4.317751
1
           4.307412
2
           4.306322
3
           4.257195
           4.241643
Tops 5 Recommendations for User 141:
  movieId
                                                        title
                                                                    genres \
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
2
      1217
                                                   Ran (1985)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
  predicted_rating
0
           4.268730
           4.250415
1
2
           4.226806
3
           4.210287
           4.187447
Tops 5 Recommendations for User 142:
  movieId
                                                          title \
      2202
                                               Lifeboat (1944)
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
     1217
                                                    Ran (1985)
```

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3
      1104
                              Streetcar Named Desire, A (1951)
    177593
             Three Billboards Outside Ebbing, Missouri (2017)
                                   genres predicted rating
0
                                Drama|War
                                                    4.781015
1
   Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.717582
2
                                                    4.664996
                                Drama|War
3
                                    Drama
                                                    4.651669
4
                              Crime|Drama
                                                    4.620196
Tops 5 Recommendations for User 143:
   movieId
    177593 Three Billboards Outside Ebbing, Missouri (2017)
1
      1217
                                                    Ran (1985)
2
     83969
                                    Down Argentine Way (1940)
3
     59141
                                         Son of Rambow (2007)
4
     1283
                                             High Noon (1952)
                  genres predicted rating
0
                                   4.311328
             Crime | Drama
1
               Drama|War
                                   4.279483
2
    Comedy|Drama|Romance
                                   4.218978
3
   Children | Comedy | Drama
                                   4.217646
           Drama|Western
                                   4.197214
Tops 5 Recommendations for User 144:
   movieId
                                                         title \
Ω
    6460
                               Trial, The (Procès, Le) (1962)
1
      1104
                             Streetcar Named Desire, A (1951)
2
     3200
                                      Last Detail, The (1973)
3
   177593 Three Billboards Outside Ebbing, Missouri (2017)
    106642
                                Day of the Doctor, The (2013)
                   genres predicted rating
0
                                    4.406123
                     Drama
                                    4.399256
1
                     Drama
2
                                    4.395003
             Comedy|Drama
3
                                    4.385462
              Crime | Drama
   Adventure | Drama | Sci-Fi
                                    4.368142
Tops 5 Recommendations for User 145:
   movieId
                                                          title
      1104
                              Streetcar Named Desire, A (1951)
1
      2202
                                               Lifeboat (1944)
2
      1178
                                         Paths of Glory (1957)
3
     27156 Neon Genesis Evangelion: The End of Evangelion...
4
      1217
                                                     Ran (1985)
                                   genres predicted rating
0
                                    Drama
1
                                Drama|War
                                                    4.392809
2
                                Drama|War
                                                    4.359014
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.352642
                                DramalWar
                                                    4.340109
Tops 5 Recommendations for User 146:
   movieId
                                                          title \
    177593
0
             Three Billboards Outside Ebbing, Missouri (2017)
1
      6460
                                Trial, The (Procès, Le) (1962)
2
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
3
      1104
                              Streetcar Named Desire, A (1951)
4
      1178
                                         Paths of Glory (1957)
                         genres predicted rating
0
                                         4.396318
                   Crime|Drama
1
                          Drama
                                         4.385639
2
   Comedy|Crime|Drama|Thriller
                                         4.373809
3
                          Drama
                                         4.368369
                      Drama|War
                                         4.349810
Tops 5 Recommendations for User 147:
  movieId
                                                          title \
```

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1
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
2
    177593
            Three Billboards Outside Ebbing, Missouri (2017)
3
      1104
                             Streetcar Named Desire, A (1951)
      3435
4
                                       Double Indemnity (1944)
                        genres predicted_rating
0
                     Drama|War
                                         4.896507
                                         4.739061
1
  Comedy|Crime|Drama|Thriller
2
                   Crime|Drama
                                         4.728190
3
                         Drama
                                         4.671937
4
         Crime|Drama|Film-Noir
                                         4.652580
Tops 5 Recommendations for User 148:
  movieId
     1104
                              Streetcar Named Desire, A (1951)
1
      8477
                                              Jetée, La (1962)
2
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
3
                                       Last Detail, The (1973)
      3200
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
4
                        genres predicted rating
0
                         Drama
                                         4.356072
1
                Romance | Sci-Fi
                                         4.325144
  Comedy|Crime|Drama|Thriller
2
                                         4.306386
3
                  Comedy|Drama
                                         4.294101
4
                   Crime|Drama
                                         4.280483
Tops 5 Recommendations for User 149:
  movieId
                                                          title \
0
     27156 Neon Genesis Evangelion: The End of Evangelion...
1
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
2
      2959
                                             Fight Club (1999)
3
      905
                                  It Happened One Night (1934)
4
      2019
                  Seven Samurai (Shichinin no samurai) (1954)
                                   genres predicted rating
                                                   4.055253
  Action|Animation|Drama|Fantasy|Sci-Fi
0
                                                   3.988377
1
             Comedy | Crime | Drama | Thriller
2
             Action|Crime|Drama|Thriller
                                                   3.861946
3
                          Comedy | Romance
                                                    3.828672
4
                  Action | Adventure | Drama
                                                   3.822019
Tops 5 Recommendations for User 150:
  movieId
                                           title
                                                            genres \
0
     6460
                Trial, The (Procès, Le) (1962)
                                                            Drama
      3451 Guess Who's Coming to Dinner (1967)
1
                                                             Drama
2
      1217
                                      Ran (1985)
                                                       Drama|War
3
      3347
                          Never Cry Wolf (1983) Adventure | Drama
      1104
              Streetcar Named Desire, A (1951)
  predicted rating
0
           4.649118
           4.641928
1
2
           4.631583
           4.621709
3
           4.620797
Tops 5 Recommendations for User 151:
  movieId
                                                         title
                                                                        genres \
0
     8132
                                              Gladiator (1992)
                                                                  Action|Drama
                                         Paths of Glory (1957)
1
      1178
                                                                     Drama|War
2
     1217
                                                    Ran (1985)
                                                                     Drama|War
3
     51931
                                          Reign Over Me (2007)
                                                                         Drama
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
  predicted rating
0
           4.670424
1
           4.652151
2
           4.649565
3
           4.638259
4
           4.634481
```

Lifeboat (1944)

0

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movieId
                                                         title \
      6460
                               Trial, The (Procès, Le) (1962)
      1104
                             Streetcar Named Desire, A (1951)
1
2
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
           Three Billboards Outside Ebbing, Missouri (2017)
   177593
     3266 Man Bites Dog (C'est arrivé près de chez vous)...
4
                                   genres predicted rating
0
                                    Drama
                                                   4.600837
1
                                    Drama
                                                   4.536554
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.501264
3
                             Crime|Drama
             Comedy | Crime | Drama | Thriller
                                                   4.458311
Tops 5 Recommendations for User 153:
  movieId
                                                        title
                                                                    genres
     1178
                                        Paths of Glory (1957)
0
                                                                  Drama|War
      6460
                              Trial, The (Procès, Le) (1962)
1
                                                                     Drama
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1041
                                        Secrets & Lies (1996)
                                                                     Drama
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                              Crime|Drama
  predicted_rating
0
           3.527959
           3.407578
1
2
           3.395668
3
           3.307846
4
           3.291875
Tops 5 Recommendations for User 154:
  movieId
0
      1237
              Seventh Seal, The (Sjunde inseglet, Det) (1957)
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
3
    51931
                                          Reign Over Me (2007)
     6460
                               Trial, The (Procès, Le) (1962)
4
                                   genres predicted rating
0
                                   Drama
                                                   5.000000
1
             Comedy|Crime|Drama|Thriller
                                                   5.000000
2
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   5.000000
3
                                                   4.963349
                                    Drama
4
                                    Drama
                                                   4.955424
Tops 5 Recommendations for User 155:
                                                         title \
  movieId
0
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
1
     3451
                          Guess Who's Coming to Dinner (1967)
2
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
3
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
4
      930
                                              Notorious (1946)
                       genres predicted rating
0
                Drama|Romance
                                        4.548649
1
                                        4.526007
                        Drama
2
                  Crime|Drama
                                       4.511088
3
                    Drama|War
                                        4.443374
  Film-Noir|Romance|Thriller
Tops 5 Recommendations for User 156:
  movieId
                                                        title \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
1
     1041
                                        Secrets & Lies (1996)
2
     89904
                                            The Artist (2011)
3
     3435
                                      Double Indemnity (1944)
4
     1104
                            Streetcar Named Desire, A (1951)
                  genres predicted rating
0
             Crime|Drama
                                  4.367139
1
                   Drama
                                   4.356470
```

Tops 5 Recommendations for User 152:

```
3
  Crime|Drama|Film-Noir
                                  4.316519
4
                   Drama
                                  4.309939
Tops 5 Recommendations for User 157:
   movieId
                                                         title \
0
    6460
                               Trial, The (Procès, Le) (1962)
   177593 Three Billboards Outside Ebbing, Missouri (2017)
1
2
    27156 Neon Genesis Evangelion: The End of Evangelion...
3
                             Streetcar Named Desire, A (1951)
     1104
    142488
4
                                             Spotlight (2015)
                                  genres predicted rating
0
                                                   4.319597
                                   Drama
1
                             Crime|Drama
                                                   4.301737
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.298625
3
                                                   4.286982
                                   Drama
                                Thriller
4
                                                   4.282480
Tops 5 Recommendations for User 158:
   movieId
                                                         title
                                                                       genres \
             Three Billboards Outside Ebbing, Missouri (2017)
0
   177593
                                                                  Crime|Drama
1
      1217
                                                    Ran (1985)
                                                                  Drama|War
                                                                Documentary
       246
                                           Hoop Dreams (1994)
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
3
      1104
                             Streetcar Named Desire, A (1951)
   predicted_rating
0
           4.451749
1
           4.427630
2
           4.332684
3
           4.322807
           4.320685
Tops 5 Recommendations for User 159:
   movieId
                                         title
                                                                genres \
    89904
                             The Artist (2011)
0
                                                Comedy|Drama|Romance
      2131 Autumn Sonata (Höstsonaten) (1978)
1
                                                                 Drama
2
                                    Ran (1985)
      1217
                                                             Drama|War
3
   116897
                             Wild Tales (2014) Comedy|Drama|Thriller
      1104
            Streetcar Named Desire, A (1951)
   predicted_rating
0
           4.135832
1
           4.134893
2
           4.132550
3
           4.124570
           4.112873
Tops 5 Recommendations for User 160:
  movieId
                                             title
                                                                       genres \
      2202
                                   Lifeboat (1944)
                                                                    Drama|War
1
      4226
                                    Memento (2000)
                                                            Mystery|Thriller
2
      1136 Monty Python and the Holy Grail (1975) Adventure | Comedy | Fantasy
3
                             Paths of Glory (1957)
      1178
                                                                    Drama|War
                             Simple Plan, A (1998) Crime|Drama|Thriller
      2391
   predicted rating
0
           4.509494
1
           4.345834
2
           4.291301
3
           4.285090
           4.248703
Tops 5 Recommendations for User 161:
   movieId
                                    title
                                                                genres \
0
     2202
                          Lifeboat (1944)
                                                             Drama|War
   106642 Day of the Doctor, The (2013)
                                              Adventure|Drama|Sci-Fi
     45210
                         United 93 (2006)
                                                          Crime | Drama
3
       930
                         Notorious (1946) Film-Noir|Romance|Thriller
      1217
                               Ran (1985)
                                                             Drama|War
```

4.330601

Comedy|Drama|Romance

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0
           4.627273
1
           4.545676
2
           4.524598
3
           4.517884
           4.516597
Tops 5 Recommendations for User 162:
   movieId
                                                          title \
0
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
3
      1178
                                         Paths of Glory (1957)
      1104
                              Streetcar Named Desire, A (1951)
                                   genres predicted rating
0
                            Drama|Romance
                                                    5.000000
1
   Action|Animation|Drama|Fantasy|Sci-Fi
                                                    5.000000
2
                              Crime|Drama
                                                    5.000000
3
                                Drama|War
                                                    4.997501
4
                                    Drama
                                                    4.996408
Tops 5 Recommendations for User 163:
   movieId
                                                          title \
                                          Paths of Glory (1957)
0
      1178
             Three Billboards Outside Ebbing, Missouri (2017)
1
    177593
2
      2202
                                                Lifeboat (1944)
3
     27156 Neon Genesis Evangelion: The End of Evangelion...
    106642
                                 Day of the Doctor, The (2013)
                                   genres predicted rating
0
                                Drama|War
                                                    4.257610
1
                              Crime | Drama
                                                    4.253185
                                Drama|War
                                                    4.185520
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.166565
                  Adventure | Drama | Sci-Fi
                                                    4.160424
Tops 5 Recommendations for User 164:
   movieId
                                                          title
      2202
0
                                                Lifeboat (1944)
1
     65642
                        Timecrimes (Cronocrimenes, Los) (2007)
2
      1262
                                      Great Escape, The (1963)
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
3
     27156 Neon Genesis Evangelion: The End of Evangelion...
4
                                   genres predicted rating
0
                                Drama|War
                                                   4.958197
1
                          Sci-Fi|Thriller
                                                    4.869599
2
              Action|Adventure|Drama|War
                                                    4.818637
3
                                Drama|War
   Action | Animation | Drama | Fantasy | Sci-Fi
Tops 5 Recommendations for User 165:
   movieId
0
    106642
                                Day of the Doctor, The (2013)
1
    177593 Three Billboards Outside Ebbing, Missouri (2017)
2
    142488
                                              Spotlight (2015)
3
      1178
                                         Paths of Glory (1957)
                          Guess Who's Coming to Dinner (1967)
      3451
                    genres predicted rating
   Adventure|Drama|Sci-Fi
                                    4.327281
0
              Crime|Drama
1
                                    4.311948
2
                 Thriller
                                    4.284521
3
                Drama|War
                                    4.238836
                                    4.234888
                     Drama
Tops 5 Recommendations for User 166:
   movieId
    177593
             Three Billboards Outside Ebbing, Missouri (2017)
      1217
1
                                                     Ran (1985)
2
      1104
                              Streetcar Named Desire, A (1951)
```

predicted rating

```
3
                                               Lifeboat (1944)
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                   genres predicted rating
0
                              Crime|Drama
                                                   4.671106
1
                                Drama|War
                                                   4.623077
2
                                                   4.620346
                                    Drama
3
                                Drama|War
                                                   4.617669
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.613145
Tops 5 Recommendations for User 167:
   movieId
                                                          title \
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
1
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
2
                                Day of the Doctor, The (2013)
    106642
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
3
4
      3451
                          Guess Who's Coming to Dinner (1967)
                         genres predicted rating
0
                                         4.304319
                 Drama|Romance
1
                   Crime|Drama
                                         4.266242
2
        Adventure|Drama|Sci-Fi
                                         4.223219
                                         4.220847
3
   Comedy | Crime | Drama | Thriller
                         Drama
                                         4.215032
Tops 5 Recommendations for User 168:
  movieId
                                                        title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1217
                                                   Ran (1985)
                                                               Drama|War
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1104
                             Streetcar Named Desire, A (1951)
                                                                     Drama
4
     1178
                                        Paths of Glory (1957)
                                                                Drama|War
   predicted rating
0
           4.980833
           4.966262
1
2
           4.948318
3
           4.944923
           4.922916
4
Tops 5 Recommendations for User 169:
   movieId
                                        title
                                                                    genres
       930
                            Notorious (1946)
                                              Film-Noir|Romance|Thriller
1
      1041
                       Secrets & Lies (1996)
                                                                     Drama
2
      1104 Streetcar Named Desire, A (1951)
                                                                     Drama
3
      1178
                      Paths of Glory (1957)
                                                                 Drama|War
4
      1217
                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
1
                  5
2
                  5
3
                  5
                  5
Tops 5 Recommendations for User 170:
   movieId
                                                        title
                                                                        genres
                             Streetcar Named Desire, A (1951)
0
      1104
                                                                         Drama
1
      1041
                                        Secrets & Lies (1996)
                                                                         Drama
2
      1217
                                                   Ran (1985)
                                                                     Drama|War
3
      8477
                                             Jetée, La (1962) Romance | Sci-Fi
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
   predicted rating
           4.382777
0
           4.335509
1
2
           4.306672
3
           4.299563
           4.278874
Tops 5 Recommendations for User 171:
```

title \

2202

movieId

```
0
       741
                   Ghost in the Shell (Kôkaku kidôtai) (1995)
1
       750
           Dr. Strangelove or: How I Learned to Stop Worr...
2
       930
                                             Notorious (1946)
3
      1041
                                         Secrets & Lies (1996)
      1178
4
                                         Paths of Glory (1957)
                       genres predicted_rating
0
             Animation|Sci-Fi
                                               5
                                               5
1
                   Comedy|War
2
                                               5
  Film-Noir|Romance|Thriller
3
                                               5
                        Drama
                                               5
4
                    Drama|War
Tops 5 Recommendations for User 172:
  movieId
                                                          title \
      2202
                                               Lifeboat (1944)
1
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
2
      1178
                                         Paths of Glory (1957)
3
      1217
                                                    Ran (1985)
      2239 Swept Away (Travolti da un insolito destino ne...
4
                        genres predicted rating
0
                     Drama|War
                                         4.570868
1
  Comedy | Crime | Drama | Thriller
                                         4.520423
2
                     Drama|War
                                         4.516573
3
                     Drama|War
                                         4.501569
4
                  Comedy|Drama
                                         4.491742
Tops 5 Recommendations for User 173:
  movieId
                                                         title \
    177593 Three Billboards Outside Ebbing, Missouri (2017)
1
                                                   Ran (1985)
2
     3200
                                      Last Detail, The (1973)
    89904
3
                                            The Artist (2011)
4
    106642
                                Day of the Doctor, The (2013)
                   genres predicted rating
0
                                   4.324142
              Crime|Drama
1
                Drama|War
                                   4.286521
2
             Comedy|Drama
                                   4.230154
3
     Comedy | Drama | Romance
                                    4.227283
  Adventure | Drama | Sci-Fi
                                    4.163354
Tops 5 Recommendations for User 174:
                                                        title
  movieId
                                                                     genres \
0
    1217
                                                   Ran (1985)
                                                                 Drama|War
1
       246
                                           Hoop Dreams (1994)
                                                               Documentary
2
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
3
     3200
                                      Last Detail, The (1973) Comedy|Drama
      176
                                    Living in Oblivion (1995)
  predicted rating
0
           4.663062
           4.626712
1
2
           4.592506
3
           4.558840
           4.558455
Tops 5 Recommendations for User 175:
  movieId
                                                        title \
0
     2202
                                              Lifeboat (1944)
1
     1217
                                                   Ran (1985)
    177593 Three Billboards Outside Ebbing, Missouri (2017)
2
                                         Touch of Evil (1958)
3
     1248
4
      2324
                  Life Is Beautiful (La Vita è bella) (1997)
                     genres predicted rating
0
                  Drama|War
                                      4.632891
1
                  Drama|War
                                      4.559421
2
                Crime|Drama
                                     4.546018
3
  Crime|Film-Noir|Thriller
                                      4.527634
  Comedy|Drama|Romance|War
                                      4.526759
```

```
Tops 5 Recommendations for User 176:
  movieId
                                                         title
                                                                         genres
      2239
           Swept Away (Travolti da un insolito destino ne...
                                                                 Comedy|Drama
1
      8477
                                              Jetée, La (1962) Romance | Sci-Fi
2
      2360
                             Celebration, The (Festen) (1998)
                                                                          Drama
                                       Last Detail, The (1973)
3
      3200
                                                                  Comedy|Drama
4
      1104
                              Streetcar Named Desire, A (1951)
                                                                          Drama
  predicted_rating
0
           4.889241
1
           4.840260
2
           4.837240
3
           4.834351
           4.826023
Tops 5 Recommendations for User 177:
  movieId
                                                        title
                                                                        genres \
                                              Lifeboat (1944)
0
      2202
                                                                    Drama|War
1
      8477
                                             Jetée, La (1962) Romance | Sci-Fi
    177593 Three Billboards Outside Ebbing, Missouri (2017)
2
                                                                Crime|Drama
                                      Last Detail, The (1973)
3
      3200
                                                                 Comedy|Drama
      6460
                               Trial, The (Procès, Le) (1962)
                                                                         Drama
  predicted_rating
0
           4.390585
           4.349205
1
2
           4.319117
3
           4.298626
4
           4.297835
Tops 5 Recommendations for User 178:
  movieId
                                                         title \
      2202
0
                                               Lifeboat (1944)
     1178
                                         Paths of Glory (1957)
1
2
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
                                         Secrets & Lies (1996)
     1041
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
4
                                   genres predicted rating
                                                   5.000000
0
                                Drama|War
1
                                Drama|War
                                                   4.859599
2
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.830934
3
                                                   4.761749
                                   Drama
4
                             Crime|Drama
                                                   4.742215
Tops 5 Recommendations for User 179:
  movieId
                                                         title
                                                                         genres \
0
     8477
                                              Jetée, La (1962) Romance|Sci-Fi
1
      2202
                                               Lifeboat (1944)
                                                                     Drama|War
2
                          Guess Who's Coming to Dinner (1967)
3
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
                                                                Drama|Romance
      1217
                                                    Ran (1985)
                                                                     Drama|War
  predicted rating
0
           4.675778
1
           4.667287
2
           4.626611
3
           4.626576
           4.624120
Tops 5 Recommendations for User 180:
  movieId
                                                        title \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
1
      4642
                            Hedwig and the Angry Inch (2000)
2
     1178
                                        Paths of Glory (1957)
3
     2202
                                              Lifeboat (1944)
    106642
                                Day of the Doctor, The (2013)
                   genres predicted rating
0
              Crime|Drama
                                   4.304684
1
    Comedy|Drama|Musical
                                    4.304356
```

```
3
                Drama|War
                                   4.232815
4 Adventure|Drama|Sci-Fi
                                   4.224779
Tops 5 Recommendations for User 181:
   movieId
                                                         title \
0
    3451
                          Guess Who's Coming to Dinner (1967)
   177593 Three Billboards Outside Ebbing, Missouri (2017)
1
                               Day of the Doctor, The (2013)
2
   106642
3
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
     62336
                                                  FLCL (2000)
4
                            genres predicted rating
0
                             Drama
                                            4.108046
1
                       Crime|Drama
                                            4.058317
2
            Adventure | Drama | Sci-Fi
                                            4.029604
3
                     Drama|Romance
                                            3.953492
  Animation | Comedy | Fantasy | Sci-Fi
                                            3.947530
Tops 5 Recommendations for User 182:
   movieId
0
     1178
                                       Paths of Glory (1957)
1
      1248
                                        Touch of Evil (1958)
    177593 Three Billboards Outside Ebbing, Missouri (2017)
3
     2202
                                             Lifeboat (1944)
4
      1217
                                                  Ran (1985)
                     genres predicted rating
                                     4.597107
0
                  Drama|War
                                     4.417500
1
  Crime|Film-Noir|Thriller
2
                Crime|Drama
                                     4.402325
3
                  Drama|War
                                     4.373952
                  Drama|War
                                     4.330998
Tops 5 Recommendations for User 183:
   movieId
                                                         title
                                                                      genres \
                                                                Documentary
    159817
                                          Planet Earth (2006)
0
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
1
                                        Secrets & Lies (1996)
2
      1041
                                                                       Drama
                                                   Ran (1985)
3
      1217
                                                                    Drama|War
4
      2202
                                              Lifeboat (1944)
                                                                    Drama|War
   predicted_rating
0
           4.497736
1
           4.454205
2
           4.452176
3
           4.448685
           4.416546
Tops 5 Recommendations for User 184:
  movieId
                                                    title
                                                                      genres \
                                  Drugstore Cowboy (1989)
     3019
                                                                Crime|Drama
               Victory (a.k.a. Escape to Victory) (1981) Action|Drama|War
1
      5915
     25771 Andalusian Dog, An (Chien andalou, Un) (1929)
2
                                                                    Fantasy
                                  Last Detail, The (1973)
3
     3200
                                                                Comedy|Drama
     1041
                                    Secrets & Lies (1996)
                                                                       Drama
   predicted rating
0
           4.667556
1
           4.604942
2
           4.575082
3
           4.540959
           4.514418
Tops 5 Recommendations for User 185:
  movieId
                                                        title \
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
1
      3200
                                     Last Detail, The (1973)
2
     1248
                                        Touch of Evil (1958)
                            Streetcar Named Desire, A (1951)
3
     1104
      2202
                                             Lifeboat (1944)
```

4.238404

2

Drama|War

```
0
                Crime | Drama
                                      4.486829
1
               Comedy|Drama
                                      4.485016
2
  Crime|Film-Noir|Thriller
                                      4.436625
3
                      Drama
                                      4.399963
4
                  Drama|War
                                      4.395143
Tops 5 Recommendations for User 186:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
      6460
                              Trial, The (Procès, Le) (1962)
1
                                                                     Drama
2
      1217
                                                   Ran (1985)
                                                                  Drama|War
3
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
  predicted rating
0
           4.862780
1
           4.802112
2
           4.784892
3
           4.784523
           4.773366
Tops 5 Recommendations for User 187:
  movieId
                                                          title \
0
      1178
                                         Paths of Glory (1957)
1
      2202
                                               Lifeboat (1944)
2
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
3
      1104
                             Streetcar Named Desire, A (1951)
4
      3683
                                           Blood Simple (1984)
                        genres predicted rating
0
                     Drama|War
                                         4.469946
1
                     Drama|War
                                         4.387157
2
  Comedy|Crime|Drama|Thriller
                                         4.362238
3
                                         4.342514
                         Drama
4
                                         4.315987
         Crime | Drama | Film-Noir
Tops 5 Recommendations for User 188:
  movieId
                                                         title \
     1217
0
                                                   Ran (1985)
1
    177593 Three Billboards Outside Ebbing, Missouri (2017)
2
       930
                                             Notorious (1946)
3
      8477
                                             Jetée, La (1962)
4
      3451
                         Guess Who's Coming to Dinner (1967)
                       genres predicted_rating
0
                    Drama|War
                                        4.978607
1
                  Crime|Drama
                                        4.952568
2
  Film-Noir|Romance|Thriller
                                        4.951651
3
               Romance|Sci-Fi
                                        4.935818
4
                        Drama
                                        4.931730
Tops 5 Recommendations for User 189:
  movieId
                                                          title
                                                                      genres \
     1178
                                         Paths of Glory (1957)
0
                                                                   Drama|War
1
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                                                   Drama|War
2
      1217
                                                    Ran (1985)
                                                                   Drama|War
3
      1104
                              Streetcar Named Desire, A (1951)
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
  predicted rating
0
           4.575271
           4.567745
1
2
           4.552427
3
           4.534704
           4.528926
Tops 5 Recommendations for User 190:
  movieId
     27156 Neon Genesis Evangelion: The End of Evangelion...
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
1
2
      1104
                              Streetcar Named Desire, A (1951)
```

genres predicted rating

```
Lifeboat (1944)
4
       720
           Wallace & Gromit: The Best of Aardman Animatio...
                                   genres predicted_rating
  Action|Animation|Drama|Fantasy|Sci-Fi
1
                              Crime|Drama
                                                   4.595294
2
                                                   4.587605
                                    Drama
3
                                Drama|War
                                                   4.577785
4
              Adventure | Animation | Comedy
                                                    4.557538
Tops 5 Recommendations for User 191:
   movieId
     6460
                                Trial, The (Procès, Le) (1962)
1
                                         Godfather, The (1972)
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
     1217
                                                     Ran (1985)
4
      1178
                                         Paths of Glory (1957)
                                   genres predicted rating
0
                                                   4.786732
                                    Drama
1
                              Crime|Drama
                                                    4.768828
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.757900
3
                                Drama|War
                                                    4.749330
                                Drama|War
4
                                                    4.723085
Tops 5 Recommendations for User 192:
   movieId
                                                          title \
0
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
1
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
    43376 Sophie Scholl: The Final Days (Sophie Scholl -...
3
       933
                                       To Catch a Thief (1955)
4
      3451
                           Guess Who's Coming to Dinner (1967)
                            genres predicted rating
0
                    Drama|Romance
                                            4.850220
1
                                            4.793105
                       Crime|Drama
2
                                            4.752647
                         Drama|War
3
                                            4.717399
  Crime | Mystery | Romance | Thriller
4
                             Drama
                                            4.672568
Tops 5 Recommendations for User 193:
   movieId
                                                          title \
      4021
                                     Before Night Falls (2000)
1
      3341
                                         Born Yesterday (1950)
2
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
3
      969
                                     African Queen, The (1951)
      2202
4
                                               Lifeboat (1944)
                          genres predicted rating
0
                                          4.390742
                          Drama
1
                          Comedy
                                          4.370152
2
    Comedy|Crime|Drama|Thriller
                                          4.348514
3
  Adventure | Comedy | Romance | War
                                          4.321959
                      Drama|War
                                          4.313132
Tops 5 Recommendations for User 194:
   movieId
                                                         title
                                                                     genres
           Three Billboards Outside Ebbing, Missouri (2017)
0
    177593
                                                               Crime|Drama
                                              Lifeboat (1944)
1
      2202
                                                                Drama|War
                             Shawshank Redemption, The (1994)
2
       318
                                                                Crime|Drama
3
      3451
                          Guess Who's Coming to Dinner (1967)
                                                                      Drama
      1237
           Seventh Seal, The (Sjunde inseglet, Det) (1957)
                                                                      Drama
   predicted rating
0
           4.461132
           4.368540
1
2
           4.356489
3
           4.348267
           4.326309
Tops 5 Recommendations for User 195:
  movieId
                                                          title \
```

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1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
      2239 Swept Away (Travolti da un insolito destino ne...
3
      1223
             Grand Day Out with Wallace and Gromit, A (1989)
4
      2360
                              Celebration, The (Festen) (1998)
                                        genres predicted_rating
0
                                         Drama
                                                        4.433373
1
        Action|Animation|Drama|Fantasy|Sci-Fi
                                                         4.369466
2
                                                         4.345142
                                  Comedy|Drama
3
   Adventure | Animation | Children | Comedy | Sci-Fi
                                                         4.342587
                                                         4.323437
Tops 5 Recommendations for User 196:
   movieId
                                                          title \
      2202
                                               Lifeboat (1944)
1
    177593
             Three Billboards Outside Ebbing, Missouri (2017)
2
      1248
                                          Touch of Evil (1958)
3
                                         Secrets & Lies (1996)
      1041
     27156 Neon Genesis Evangelion: The End of Evangelion...
4
                                   genres predicted rating
0
                                Drama|War
                                                    4.479545
1
                              Crime|Drama
                                                    4.403301
2
                Crime|Film-Noir|Thriller
                                                    4.392042
3
                                    Drama
                                                    4.390527
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.387974
Tops 5 Recommendations for User 197:
   movieId
                                                          title \
0
      3200
                                       Last Detail, The (1973)
1
      3347
                                         Never Cry Wolf (1983)
2
      3451
                           Guess Who's Coming to Dinner (1967)
3
     27156 Neon Genesis Evangelion: The End of Evangelion...
4
      905
                                  It Happened One Night (1934)
                                   genres predicted rating
0
                             Comedy|Drama
                                                   4.442825
1
                          Adventure | Drama
                                                    4.428150
2
                                    Drama
                                                    4.421254
3
  Action | Animation | Drama | Fantasy | Sci-Fi
                                                    4.404982
                           Comedy | Romance
                                                    4.388115
Tops 5 Recommendations for User 198:
   movieId
                                                         title \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
1
      3200
                                      Last Detail, The (1973)
2
      5915
                   Victory (a.k.a. Escape to Victory) (1981)
3
    132333
                                                   Seve (2014)
      8477
                                             Jetée, La (1962)
              genres predicted rating
0
         Crime|Drama
                              4.399719
1
        Comedy|Drama
                               4.396582
2
   Action|Drama|War
                               4.385450
3
   Documentary | Drama
                               4.382263
      Romance|Sci-Fi
                               4.380208
Tops 5 Recommendations for User 199:
   movieId
                                                          title
                                                                         genres
0
      2202
                                               Lifeboat (1944)
                                                                     Drama|War
1
      1104
                              Streetcar Named Desire, A (1951)
                                                                          Drama
2
    177593
                                                                 Crime, Documentary
            Three Billboards Outside Ebbing, Missouri (2017)
3
                                            Hoop Dreams (1994)
4
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
   predicted rating
0
           4.303827
1
           4.300365
2
           4.293393
3
           4.208351
4
           4.202445
```

Babette's Feast (Babettes gæstebud) (1987)

0

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Tops 5 Recommendations for User 200:
  movieId
                                                         title
                                                                       genres
   177593
            Three Billboards Outside Ebbing, Missouri (2017)
                                                                  Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                     Drama
2
                                        Paths of Glory (1957)
      1178
                                                                    Drama|War
3
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                                                    Drama|War
  predicted rating
0
           4.702533
1
           4.666187
2
           4.650036
3
           4.637744
           4.632852
Tops 5 Recommendations for User 201:
  movieId
                                                         title \
0
     1262
                                     Great Escape, The (1963)
     27156 Neon Genesis Evangelion: The End of Evangelion...
1
2
      2202
                                               Lifeboat (1944)
3
      1178
                                         Paths of Glory (1957)
      912
                                            Casablanca (1942)
                                  genres predicted_rating
0
              Action|Adventure|Drama|War
                                                  4.972171
1
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.965554
2
                               Drama|War
                                                  4.930892
3
                               Drama|War
                                                  4.921448
                                                   4.913947
4
                           Drama|Romance
Tops 5 Recommendations for User 202:
  movieId
                                                        title
                                                                    genres
      2202
0
                                             Lifeboat (1944)
                                                                 Drama|War
1
     1178
                                       Paths of Glory (1957)
                                                                 Drama|War
2
     1104
                            Streetcar Named Desire, A (1951)
                                                                     Drama
3
                         Guess Who's Coming to Dinner (1967)
      3451
                                                                     Drama
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
  predicted rating
0
           4.620778
1
           4.616123
2
           4.598482
3
           4.559719
4
           4.548268
Tops 5 Recommendations for User 203:
  movieId
                                                         title \
     4642
0
                             Hedwig and the Angry Inch (2000)
1
      905
                                 It Happened One Night (1934)
2
      2239 Swept Away (Travolti da un insolito destino ne...
3
                          Guess Who's Coming to Dinner (1967)
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
                 genres predicted rating
0
  Comedy|Drama|Musical
                                 4.632653
                                 4.629718
1
         Comedy|Romance
2
           Comedy|Drama
                                 4.602470
3
                  Drama
                                 4.598489
          Drama|Romance
Tops 5 Recommendations for User 204:
  movieId
                                                        title
                                                                    genres \
                            Streetcar Named Desire, A (1951)
0
     1104
                                                                     Drama
      2202
1
                                             Lifeboat (1944)
                                                                 Drama|War
2
     6460
                              Trial, The (Procès, Le) (1962)
3
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
     1041
                                       Secrets & Lies (1996)
  predicted rating
0
           4.842750
           4.791845
1
```

```
3
           4.740809
4
           4.719202
Tops 5 Recommendations for User 205:
  movieId
                                                       title \
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
     6460
                              Trial, The (Procès, Le) (1962)
1
2
     1223 Grand Day Out with Wallace and Gromit, A (1989)
3
     2202
                                             Lifeboat (1944)
     1217
                                                  Ran (1985)
4
                                       genres predicted rating
0
                                  Crime|Drama
1
                                        Drama
                                                       4.397855
  Adventure | Animation | Children | Comedy | Sci-Fi
                                                       4.376280
3
                                    Drama|War
                                                       4.373592
4
                                    Drama|War
                                                       4.357216
Tops 5 Recommendations for User 206:
  movieId
                                          title
                                                 genres predicted rating
0
     2202
                                Lifeboat (1944) Drama|War
                                                                    5.000000
                                                 Drama
1
      3451 Guess Who's Coming to Dinner (1967)
                                                                    4.925386
     1217
                                     Ran (1985)
                                                 Drama|War
                                                                    4.913970
3
     1104
              Streetcar Named Desire, A (1951)
                                                                    4.900628
                                                     Drama
                                                                     4.856032
     1178
                          Paths of Glory (1957) Drama|War
Tops 5 Recommendations for User 207:
  movieId
                                                         title \
0
     1104
                             Streetcar Named Desire, A (1951)
1
     1217
    27156 Neon Genesis Evangelion: The End of Evangelion...
3
      750 Dr. Strangelove or: How I Learned to Stop Worr...
     2202
                                              Lifeboat (1944)
                                  genres predicted rating
0
                                                  4.482684
                                   Drama
                                                  4.461529
1
                               Drama|War
2
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.458516
3
                              Comedy|War
                                                  4.453332
4
                               Drama|War
                                                  4.418448
Tops 5 Recommendations for User 208:
                                                    genres predicted_rating
  movieId
                                       title
     1104 Streetcar Named Desire, A (1951)
                                                    Drama
0
                                                               4.375518
1
      3200
                   Last Detail, The (1973) Comedy|Drama
                                                                    4.351059
2
                      Paths of Glory (1957)
     1178
                                             Drama|War
                                                                    4.349513
3
                     Schindler's List (1993)
      527
                                                Drama|War
                                                                    4.330517
     1272
                               Patton (1970)
                                                Drama|War
                                                                    4.325990
Tops 5 Recommendations for User 209:
  movieId
                                                        title
0
     2202
                                              Lifeboat (1944)
     3266 Man Bites Dog (C'est arrivé près de chez vous)...
1
2
     1104
                             Streetcar Named Desire, A (1951)
3
     1248
                                         Touch of Evil (1958)
     1237
            Seventh Seal, The (Sjunde inseglet, Det) (1957)
4
                        genres predicted rating
0
                     Drama|War
                                        4.846036
1
  Comedy | Crime | Drama | Thriller
                                        4.770817
2
                                        4.729347
                         Drama
3
     Crime|Film-Noir|Thriller
                                        4.667511
4
                         Drama
                                        4.650714
Tops 5 Recommendations for User 210:
  movieId
                                                       title
                                                                    genres
0
     3451
                         Guess Who's Coming to Dinner (1967)
1
     1104
                            Streetcar Named Desire, A (1951)
2
     3200
                                     Last Detail, The (1973) Comedy | Drama
3
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                              Crime|Drama
```

Gladiator (1992) Action|Drama

2

4

8132

4.745695

```
predicted rating
0
          4.895876
1
           4.872936
2
           4.852253
3
           4.800763
4
           4.796793
Tops 5 Recommendations for User 211:
                                                        title \
  movieId
0
     3266 Man Bites Dog (C'est arrivé près de chez vous)...
1
     2202
                                             Lifeboat (1944)
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
     3451
                          Guess Who's Coming to Dinner (1967)
     1178
                                        Paths of Glory (1957)
                                  genres predicted_rating
0
             Comedy|Crime|Drama|Thriller
                                                  4.539576
1
                               Drama|War
                                                  4.529485
  Action|Animation|Drama|Fantasy|Sci-Fi
3
                                   Drama
4
                               Drama|War
                                                  4.495852
Tops 5 Recommendations for User 212:
   movieId
                                          title
                                                                      genres \
0
     1104
              Streetcar Named Desire, A (1951)
                                                                      Drama
      3451 Guess Who's Coming to Dinner (1967)
1
                                                                      Drama
      6460 Trial, The (Procès, Le) (1962)
                                                                      Drama
3
     1178
                          Paths of Glory (1957)
                                                                   Drama|War
      930
4
                               Notorious (1946) Film-Noir|Romance|Thriller
   predicted rating
           4.350417
1
           4.243778
2
           4.234560
3
           4.220801
           4.214885
Tops 5 Recommendations for User 213:
   movieId
           Three Billboards Outside Ebbing, Missouri (2017)
   177593
1
      6460
                               Trial, The (Procès, Le) (1962)
2
      2239 Swept Away (Travolti da un insolito destino ne...
3
      930
                                             Notorious (1946)
4
      1041
                                        Secrets & Lies (1996)
                       genres predicted_rating
0
                  Crime|Drama
                                      4.655034
1
                       Drama
                                       4.654221
2
                 Comedy|Drama
                                       4.614691
  Film-Noir|Romance|Thriller
                                       4.599759
                                       4.599578
Tops 5 Recommendations for User 214:
  movieId
   177593
\cap
           Three Billboards Outside Ebbing, Missouri (2017)
     1178
                                        Paths of Glory (1957)
1
2
     1104
                             Streetcar Named Desire, A (1951)
3
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
    106642
                                Day of the Doctor, The (2013)
                        genres predicted_rating
                                        4.115337
0
                   Crime|Drama
1
                     Drama|War
                                        3.985305
2
                                        3.960162
                         Drama
                                        3.955224
3
 Comedy|Crime|Drama|Thriller
       Adventure|Drama|Sci-Fi
                                        3.933970
Tops 5 Recommendations for User 215:
  movieId
                                                       title
                                                                    genres
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
     6460
                              Trial, The (Procès, Le) (1962)
```

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3200
                                      Last Detail, The (1973) Comedy|Drama
                                                                Drama|War
3
      1178
                                        Paths of Glory (1957)
4
      6791
                 Babette's Feast (Babettes gæstebud) (1987)
   predicted_rating
0
           4.580682
1
           4.506637
2
           4.504548
3
           4.486357
4
           4.475951
Tops 5 Recommendations for User 216:
                                                          title \
     27156 Neon Genesis Evangelion: The End of Evangelion...
1
                                               Lifeboat (1944)
      318
                              Shawshank Redemption, The (1994)
3
      8477
                                              Jetée, La (1962)
4
      6460
                                Trial, The (Procès, Le) (1962)
                                   genres predicted_rating
  Action|Animation|Drama|Fantasy|Sci-Fi
1
                                Drama|War
                                                    4.463403
2
                              Crime|Drama
                                                   4.437476
3
                           Romance | Sci-Fi
                                                   4.431376
                                                    4.384621
                                    Drama
Tops 5 Recommendations for User 217:
  movieId
                                                         title \
0
      3451
                         Guess Who's Coming to Dinner (1967)
1
    177593 Three Billboards Outside Ebbing, Missouri (2017)
2
       930
                                             Notorious (1946)
3
   106642
                                Day of the Doctor, The (2013)
      246
                                           Hoop Dreams (1994)
4
                       genres predicted rating
0
                                        3.922215
                        Drama
                                        3.906358
1
                  Crime|Drama
2
                                        3.887430
  Film-Noir|Romance|Thriller
3
      Adventure|Drama|Sci-Fi
                                        3.879839
4
                  Documentary
                                        3.842954
Tops 5 Recommendations for User 218:
   movieId
                                                          title \
0
      2202
                                               Lifeboat (1944)
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
1
2
      1203
                                           12 Angry Men (1957)
3
      2360
                              Celebration, The (Festen) (1998)
      1178
                                         Paths of Glory (1957)
4
                        genres predicted rating
0
                     Drama|War
                                         4.290822
1
  Comedy | Crime | Drama | Thriller
                                         4.248200
2
                                         4.166277
                         Drama
3
                         Drama
                                         4.152313
                     Drama|War
4
                                         4.148931
Tops 5 Recommendations for User 219:
   movieId
                                        Paths of Glory (1957)
0
     1178
    177593 Three Billboards Outside Ebbing, Missouri (2017)
1
2
     25771
              Andalusian Dog, An (Chien andalou, Un) (1929)
3
      6460
                               Trial, The (Procès, Le) (1962)
4
      898
                               Philadelphia Story, The (1940)
                 genres predicted rating
0
                                 4.192294
              Drama|War
1
            Crime|Drama
                                  4.153041
2
                Fantasy
                                  4.151988
3
                  Drama
                                  4.139449
   Comedy | Drama | Romance
                                  4.135595
```

Tops 5 Recommendations for User 220:

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movieId
                                                          title
0
    177593
             Three Billboards Outside Ebbing, Missouri (2017)
1
      3451
                         Guess Who's Coming to Dinner (1967)
2
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
      1041
                                         Secrets & Lies (1996)
      1217
4
                                                    Ran (1985)
                                   genres predicted rating
0
                                                   4.725739
                              Crime|Drama
1
                                                   4.713421
                                    Drama
2
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.671089
3
                                    Drama
                                                   4.669769
4
                                Drama|War
Tops 5 Recommendations for User 221:
  movieId
                                                          title \
0
     1178
                                         Paths of Glory (1957)
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
    177593
            Three Billboards Outside Ebbing, Missouri (2017)
3
     1217
                                                    Ran (1985)
      2202
                                               Lifeboat (1944)
                                   genres predicted rating
0
                                Drama|War
                                                   4.692212
1
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.680574
2
                              Crime|Drama
                                                   4.669788
3
                                Drama|War
                                                   4.658581
4
                                Drama|War
                                                   4.649871
Tops 5 Recommendations for User 222:
   movieId
                                                        title
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
       246
                                           Hoop Dreams (1994) Documentary
                            Streetcar Named Desire, A (1951)
2
      1104
                                                                      Drama
3
    142488
                                             Spotlight (2015)
                                                                  Thriller
                                                   Ran (1985)
     1217
4
                                                                Drama|War
   predicted rating
0
           4.055191
1
           4.005121
2
           3.997551
3
           3.987680
4
           3.985250
Tops 5 Recommendations for User 223:
  movieId
                                                         title \
    177593
0
           Three Billboards Outside Ebbing, Missouri (2017)
1
      8477
                                              Jetée, La (1962)
2
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
3
      1248
                                          Touch of Evil (1958)
      1178
                                         Paths of Glory (1957)
                        genres predicted rating
0
                   Crime|Drama
                                         4.111109
1
                Romance|Sci-Fi
                                         4.094354
2
   Comedy|Crime|Drama|Thriller
                                         4.040908
3
     Crime|Film-Noir|Thriller
                                         4.040050
4
                     Drama|War
                                         4.035996
Tops 5 Recommendations for User 224:
  movieId
                                                      genres predicted rating
                                          title
0
      1104
             Streetcar Named Desire, A (1951)
                                                                       5.000000
                                                       Drama
1
      2131 Autumn Sonata (Höstsonaten) (1978)
                                                       Drama
                                                                       5.000000
2
                                Lifeboat (1944)
      2202
                                                  Drama|War
                                                                       4.993116
3
      162
                                   Crumb (1994) Documentary
                                                                       4.969144
      3468
                           Hustler, The (1961)
                                                       Drama
                                                                       4.893228
Tops 5 Recommendations for User 225:
   movieId
                                                        title
                                                                    genres
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
1
2
    142488
                                             Spotlight (2015)
                                                                   Thriller
```

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3
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
4
       246
                                            Hoop Dreams (1994) Documentary
   predicted rating
0
           4.678468
1
           4.578572
2
           4.558038
3
           4.555102
4
           4.549538
Tops 5 Recommendations for User 226:
   movieId
                                                          title \
      1217
                                                     Ran (1985)
1
      1178
                                          Paths of Glory (1957)
2
      1104
                              Streetcar Named Desire, A (1951)
3
     51931
                                           Reign Over Me (2007)
4
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                   genres predicted rating
0
                                Drama|War
                                                    4.339263
1
                                Drama|War
                                                    4.332037
2
                                    Drama
                                                    4.315529
3
                                                    4.307440
                                    Drama
   Action|Animation|Drama|Fantasy|Sci-Fi
Tops 5 Recommendations for User 227:
   movieId
                                                         title
                                                                      genres \
Ω
     6460
                               Trial, The (Procès, Le) (1962)
                                                                       Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
3
      2202
                                               Lifeboat (1944)
                                                                 Drama|War
4
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted rating
0
           4.768404
           4.740532
1
2
           4.712566
3
           4.707543
4
           4.692852
Tops 5 Recommendations for User 228:
   movieId
                                        title
                                                               genres \
      2360 Celebration, The (Festen) (1998)
                                                                Drama
1
      1217
                                   Ran (1985)
                                                           Drama|War
2
      1204
                   Lawrence of Arabia (1962)
                                                 Adventure|Drama|War
      2202
3
                              Lifeboat (1944)
                                                           Drama|War
4
     89904
                            The Artist (2011)
                                               Comedy|Drama|Romance
   predicted rating
           4.639784
1
           4.608043
2
           4.548152
3
           4.543741
           4.540164
Tops 5 Recommendations for User 229:
   movieId
                                                          title
                                                                      genres
0
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
2
      1217
                                                    Ran (1985)
                                                                   Drama|War
3
      3451
                          Guess Who's Coming to Dinner (1967)
                                                                       Drama
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
   predicted rating
0
           4.581902
           4.524985
1
2
           4.514310
3
           4.505313
           4.504462
Tops 5 Recommendations for User 230:
   movieId
                                                           title
                                                                        genres \
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Trial, The (Procès, Le) (1962)
0
     6460
                                                                     Drama
           Three Billboards Outside Ebbing, Missouri (2017)
                                                              Crime|Drama
1
   177593
                                     Cookie's Fortune (1999) Comedy|Drama
2
     2583
3
     8132
                                            Gladiator (1992) Action|Drama
4
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                                                Drama|War
  predicted_rating
0
          4.026534
          3.995905
1
2
          3.905717
3
          3.904671
          3.895306
Tops 5 Recommendations for User 231:
  movieId
                                      title
                                                                 genres \
             Trial, The (Procès, Le) (1962)
     6460
                                                                  Drama
                       Touch of Evil (1958)
                                            Crime|Film-Noir|Thriller
1
     1248
                           Notorious (1946) Film-Noir|Romance|Thriller
2
      930
3
     3836
                      Kelly's Heroes (1970)
                                                  Action|Comedy|War
     1104 Streetcar Named Desire, A (1951)
                                                                  Drama
  predicted rating
0
          4.339714
1
          4.311960
2
          4.297592
3
          4.257321
          4.239722
Tops 5 Recommendations for User 232:
  movieId
                                                       title
                                                                  genres \
0
    43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                                              Drama|War
1
     2202
                                             Lifeboat (1944)
2
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
3
     1104
                            Streetcar Named Desire, A (1951)
                                                                   Drama
4
     1217
                                                  Ran (1985)
                                                              Drama|War
  predicted rating
          4.299193
0
          4.237748
1
2
          4.227806
3
          4.216431
          4.201092
Tops 5 Recommendations for User 233:
  movieId
                                      title genres predicted rating
0
    1178
                      Paths of Glory (1957) Drama|War 4.161805
1
     2202
                           Lifeboat (1944) Drama|War
                                                               4.024983
2
     1104 Streetcar Named Desire, A (1951) Drama
                                                               4.014828
3
     1041
                     Secrets & Lies (1996)
                                                Drama
                                                                4.005718
     6460
           Trial, The (Procès, Le) (1962)
                                                Drama
                                                                3.975014
Tops 5 Recommendations for User 234:
  movieId
                                                      title
                                                                 genres
     2202
                                            Lifeboat (1944)
0
                                                               Drama|War
                                           Spotlight (2015)
1
   142488
                                                               Thriller
                           Celebration, The (Festen) (1998)
2
    2360
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
3
     1178
                                      Paths of Glory (1957)
                                                             Drama|War
  predicted_rating
0
          4.737444
          4.665494
1
          4.638685
2
3
          4.608171
          4.605536
Tops 5 Recommendations for User 235:
  movieId
                                                       title \
0
     2202
                                             Lifeboat (1944)
1
     1217
                                                  Ran (1985)
2
    27156 Neon Genesis Evangelion: The End of Evangelion...
3
      720 Wallace & Gromit: The Best of Aardman Animatio...
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1178
                                         Paths of Glory (1957)
                                  genres predicted_rating
0
                               Drama|War
                                                  4.685042
1
                               Drama|War
                                                   4.587975
2
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.558679
3
              Adventure | Animation | Comedy
                                                  4.529948
4
                               Drama|War
                                                   4.512367
Tops 5 Recommendations for User 236:
  movieId
                                                         title \
0
     2202
                                              Lifeboat (1944)
1
   177593 Three Billboards Outside Ebbing, Missouri (2017)
2
     1104
                             Streetcar Named Desire, A (1951)
3
      541
                                          Blade Runner (1982)
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                  genres predicted rating
0
                               Drama|War
                                                   5.000000
1
                             Crime|Drama
                                                   4.980446
2
                                   Drama
                                                   4.962667
3
                  Action|Sci-Fi|Thriller
                                                   4.962485
  Action | Animation | Drama | Fantasy | Sci-Fi
Tops 5 Recommendations for User 237:
  movieId
                                                         title \
0
    27156 Neon Genesis Evangelion: The End of Evangelion...
1
    177593 Three Billboards Outside Ebbing, Missouri (2017)
2
     2202
                                              Lifeboat (1944)
3
     1178
                                         Paths of Glory (1957)
4
     8477
                                              Jetée, La (1962)
                                  genres predicted rating
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.154629
1
                             Crime|Drama
                                                  4.146983
2
                                                  4.097368
                               Drama|War
3
                                                   4.062014
                               Drama|War
4
                          Romance|Sci-Fi
                                                   4.027977
Tops 5 Recommendations for User 238:
   movieId
                                                        title \
0
   177593 Three Billboards Outside Ebbing, Missouri (2017)
1
       905
                                It Happened One Night (1934)
2
    87234
                                             Submarine (2010)
3
     6460
                              Trial, The (Procès, Le) (1962)
4
      1178
                                       Paths of Glory (1957)
                 genres predicted rating
0
            Crime|Drama 4.512258
1
         Comedy|Romance
                                 4.438503
  Comedy | Drama | Romance
                                 4.384285
3
                  Drama
                                 4.367150
4
              Drama|War
                                 4.358432
Tops 5 Recommendations for User 239:
  movieId
                                                         title \
0
     2202
                                              Lifeboat (1944)
     27156 Neon Genesis Evangelion: The End of Evangelion...
1
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
3
     6460
                               Trial, The (Procès, Le) (1962)
      1217
                                                    Ran (1985)
                                  genres predicted rating
                                                  4.733320
0
                               Drama|War
                                                   4.702032
1
  Action|Animation|Drama|Fantasy|Sci-Fi
2
                                                  4.691453
                             Crime|Drama
3
                                   Drama
                                                   4.687857
                               Drama|War
                                                   4.671683
Tops 5 Recommendations for User 240:
  movieId
                                                         title
                                                                      genres
    43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                                                  Drama|War
```

```
1
                                               Gladiator (1992) Action|Drama
      8132
2
      1217
                                                    Ran (1985)
3
    177593
             Three Billboards Outside Ebbing, Missouri (2017)
                                                                  Crime | Drama
     80906
                                             Inside Job (2010)
                                                                 Documentary
   predicted_rating
0
           4.943035
           4.920863
1
2
           4.904092
3
           4.903384
           4.894894
Tops 5 Recommendations for User 241:
   movieId
     1104
                              Streetcar Named Desire, A (1951)
1
     1178
                                         Paths of Glory (1957)
2
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
3
    7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
                                 Day of the Doctor, The (2013)
    106642
                   genres predicted rating
0
                    Drama
                                    4.442946
1
                Drama|War
                                    4.420463
2
              Crime|Drama
                                    4.402950
3
            Drama|Romance
                                    4.400737
                                    4.373130
  Adventure|Drama|Sci-Fi
Tops 5 Recommendations for User 242:
   movieId
                                                          title \
0
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
1
      2959
                                             Fight Club (1999)
2
     2202
                                               Lifeboat (1944)
3
     1104
                              Streetcar Named Desire, A (1951)
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                   genres predicted rating
0
             Comedy|Crime|Drama|Thriller
                                                   4.554771
1
                                                   4.545546
             Action | Crime | Drama | Thriller
2
                                Drama|War
                                                   4.498366
3
                                    Drama
                                                    4.488880
  Action | Animation | Drama | Fantasy | Sci-Fi
                                                    4.480316
Tops 5 Recommendations for User 243:
  movieId
                                                          title \
0
      930
                                              Notorious (1946)
1
      1178
                                         Paths of Glory (1957)
2
      1237
             Seventh Seal, The (Sjunde inseglet, Det) (1957)
3
      2239 Swept Away (Travolti da un insolito destino ne...
4
      3200
                                       Last Detail, The (1973)
                       genres predicted rating
  Film-Noir|Romance|Thriller
1
                    Drama|War
                                               5
2
                         Drama
                                               5
3
                 Comedy|Drama
                 Comedy | Drama
Tops 5 Recommendations for User 244:
   movieId
                                                          title \
0
      2202
                                               Lifeboat (1944)
      1272
1
                                                  Patton (1970)
                       Timecrimes (Cronocrímenes, Los) (2007)
2
     65642
3
     1210 Star Wars: Episode VI - Return of the Jedi (1983)
4
      1104
                              Streetcar Named Desire, A (1951)
                    genres predicted rating
0
                 Drama|War
                                     4.666210
1
                 Drama|War
                                     4.587370
2
           Sci-Fi|Thriller
                                     4.575584
  Action | Adventure | Sci-Fi
                                     4.575314
                     Drama
                                     4.572714
```

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Tops 5 Recommendations for User 245:
  movieId
0
     1104
                             Streetcar Named Desire, A (1951)
1
   106642
                                Day of the Doctor, The (2013)
2
                                            Wild Tales (2014)
   116897
3
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
4
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
                   genres predicted_rating
0
                                   3.648981
                    Drama
                                   3.635959
1
  Adventure|Drama|Sci-Fi
2
   Comedy|Drama|Thriller
                                   3.602297
3
            Drama|Romance
                                   3.593481
              Crime|Drama
                                   3.592936
Tops 5 Recommendations for User 246:
  movieId
                                                         title
                                                                     genres \
0
   177593
            Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                               Trial, The (Procès, Le) (1962)
1
     6460
2
                             Celebration, The (Festen) (1998)
      2360
3
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                                                  Drama|War
     1178
                                        Paths of Glory (1957)
                                                                  Drama|War
  predicted_rating
0
           4.963755
1
           4.927290
2
           4.925025
3
           4.905113
           4.886476
Tops 5 Recommendations for User 247:
  movieId
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
1
     1041
                                        Secrets & Lies (1996)
2
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
     1104
                             Streetcar Named Desire, A (1951)
     2202
                                               Lifeboat (1944)
4
                                  genres predicted rating
0
                             Crime|Drama
                                                  4.317075
                                   Drama
                                                   4.301209
2
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.293445
3
                                   Drama
                                                   4.281897
4
                                                   4.262531
                               Drama|War
Tops 5 Recommendations for User 248:
  movieId
                                                        title
                                                                    genres
0
     2202
                                             Lifeboat (1944)
                                                                 Drama|War
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
2
     1178
                                       Paths of Glory (1957)
                                                              Drama|War
3
     1104
                            Streetcar Named Desire, A (1951)
                                                                    Drama
     1217
                                                   Ran (1985)
                                                              Drama|War
  predicted rating
           4.434864
0
1
           4.422905
2
           4.405198
3
           4.392344
           4.378933
Tops 5 Recommendations for User 249:
  movieId
                                                         title \
           Three Billboards Outside Ebbing, Missouri (2017)
0
   177593
1
      2202
                                              Lifeboat (1944)
2
     3451
                          Guess Who's Coming to Dinner (1967)
3
     27156 Neon Genesis Evangelion: The End of Evangelion...
4
     1217
                                  genres predicted rating
0
                             Crime | Drama
                                                  4.611699
1
                               Drama|War
                                                   4.595643
2
                                   Drama
                                                   4.574052
```

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Action|Animation|Drama|Fantasy|Sci-Fi
                                                 4.567526
                              Drama|War
                                                 4.565845
Tops 5 Recommendations for User 250:
  movieId
                                                title \
      246
                                   Hoop Dreams (1994)
1
      741 Ghost in the Shell (Kôkaku kidôtai) (1995)
2
      930
                                    Notorious (1946)
3
     1041
                                Secrets & Lies (1996)
     1104
4
                     Streetcar Named Desire, A (1951)
                      genres predicted rating
0
                 Documentary
                                             5
1
            Animation|Sci-Fi
                                             5
  Film-Noir|Romance|Thriller
3
                       Drama
4
                       Drama
Tops 5 Recommendations for User 251:
  movieId
                                      title
                                                genres predicted rating
                        Hoop Dreams (1994) Documentary
0
      246
                                                                         5
1
     1041
                      Secrets & Lies (1996)
                                                                         5
2
     1104 Streetcar Named Desire, A (1951)
                                                  Drama
                                            Drama|War
3
                                                                         5
     1178
                      Paths of Glory (1957)
                                 Ran (1985)
     1217
                                             Drama|War
Tops 5 Recommendations for User 252:
  movieId
                                                       title \
0
     1104
                            Streetcar Named Desire, A (1951)
1
     1178
                                       Paths of Glory (1957)
    27156 Neon Genesis Evangelion: The End of Evangelion...
  177593 Three Billboards Outside Ebbing, Missouri (2017)
     905
                                It Happened One Night (1934)
                                 genres predicted rating
0
                                               4.814531
                                  Drama
                                                4.812304
1
                              Drama|War
2
                                                4.802157
  Action|Animation|Drama|Fantasy|Sci-Fi
3
                            Crime|Drama
                                                4.746924
4
                         Comedy|Romance
                                                4.718708
Tops 5 Recommendations for User 253:
                                      title
  movieId
                                                   genres predicted rating
     1104 Streetcar Named Desire, A (1951)
                                                    Drama 4.886264
0
     2202
1
                           Lifeboat (1944)
                                                Drama|War
                                                                    4.861847
2
     1178
                      Paths of Glory (1957)
                                                Drama|War
                                                                    4.848144
3
     1217
                                 Ran (1985)
                                                                    4.833817
                                                 Drama|War
      905
               It Happened One Night (1934) Comedy|Romance
                                                                    4.802982
Tops 5 Recommendations for User 254:
  movieId
                                      title
                                                    genres predicted rating
     1217
                                 Ran (1985)
                                                 Drama|War
                                                                    4.626087
1
     1178
                      Paths of Glory (1957)
                                                 Drama|War
                                                                    4.590010
2
     1104 Streetcar Named Desire, A (1951)
                                                    Drama
                                                                    4.551361
                                            Drama|War
3
                            Lifeboat (1944)
     2202
                                                                    4.544483
                           Jetée, La (1962) Romance|Sci-Fi
     8477
                                                                    4.522660
Tops 5 Recommendations for User 255:
  movieId
                                                    title \
0
     1172 Cinema Paradiso (Nuovo cinema Paradiso) (1989)
1
   133867
                                     Barely Lethal (2015)
2
    6460
                           Trial, The (Procès, Le) (1962)
3
   142488
                                         Spotlight (2015)
    2571
                                       Matrix, The (1999)
                   genres predicted rating
0
                    Drama 3.758565
  Action|Adventure|Comedy
                                  3.710778
2
                    Drama
                                  3.703862
3
                 Thriller
                                  3.649162
   Action|Sci-Fi|Thriller
                                  3.569255
```

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movieId
                                                      title \
                                    Last Detail, The (1973)
0
     3200
1
   177593 Three Billboards Outside Ebbing, Missouri (2017)
2
                       Guess Who's Coming to Dinner (1967)
3
     1104
                           Streetcar Named Desire, A (1951)
      930
4
                                           Notorious (1946)
                      genres predicted rating
0
                Comedy|Drama
                                      4.854415
1
                 Crime|Drama
                                      4.789160
2
                       Drama
                                      4.786162
3
                       Drama
                                      4.777589
 Film-Noir|Romance|Thriller
                                      4.738495
Tops 5 Recommendations for User 257:
  movieId
                                                                   genres \
                                                      title
0
     6460
                             Trial, The (Procès, Le) (1962)
                                                                    Drama
1
     8132
                                           Gladiator (1992) Action|Drama
   177593 Three Billboards Outside Ebbing, Missouri (2017)
2
                                                             Crime|Drama
                                         Hoop Dreams (1994)
3
                                                              Documentary
     2202
                                            Lifeboat (1944)
4
                                                             Drama|War
  predicted_rating
0
          4.324443
1
          4.172258
2
          4.172044
3
          4.171147
          4.161132
Tops 5 Recommendations for User 258:
  movieId
                                                      title
                                                                  genres \
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                      Paths of Glory (1957)
1
     1178
                                                             DramalWar
                                              Patton (1970)
2
     1272
                                                               Drama|War
                           Streetcar Named Desire, A (1951)
3
     1104
                                                                  Drama
    45503
                                    Peaceful Warrior (2006)
4
                                                                  Drama
  predicted rating
          4.765984
0
1
          4.734415
2
          4.696727
3
          4.682612
          4.671650
Tops 5 Recommendations for User 259:
  movieId
                                      title
                                                             genres \
     5992
0
                          Hours, The (2002)
                                                 Drama|Romance
                            Dogville (2003) Drama|Mystery|Thriller
1
     7371
     1104 Streetcar Named Desire, A (1951)
3
     62293
                        Duchess, The (2008)
                                                      Drama|Romance
     6460 Trial, The (Procès, Le) (1962)
  predicted rating
0
          4.129916
1
          4.119299
2
          4.099528
3
          4.091610
          4.088323
Tops 5 Recommendations for User 260:
  movieId
                                                                   genres \
                                                       title
                                             Lifeboat (1944)
0
    2202
                                                                Drama|War
     1104
                            Streetcar Named Desire, A (1951)
1
2
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                              Trial, The (Procès, Le) (1962) Drama
3
    43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                                               Drama|War
  predicted rating
0
          4.435014
1
          4.429348
2
          4.410876
```

Tops 5 Recommendations for User 256:

```
4.391132
Tops 5 Recommendations for User 261:
  movieId
                                                        title \
     2202
                                             Lifeboat (1944)
1
      720 Wallace & Gromit: The Best of Aardman Animatio...
2
    27156 Neon Genesis Evangelion: The End of Evangelion...
3
     778
                                        Trainspotting (1996)
4
     1104
                             Streetcar Named Desire, A (1951)
                                  genres predicted rating
0
                               Drama|War
1
              Adventure | Animation | Comedy
  Action|Animation|Drama|Fantasy|Sci-Fi
3
                      Comedy|Crime|Drama
                                                 4.498462
4
                                   Drama
                                                  4.473777
Tops 5 Recommendations for User 262:
  movieId
                                                       title \
    89904
0
                                           The Artist (2011)
    177593 Three Billboards Outside Ebbing, Missouri (2017)
1
    51931
2
                                        Reign Over Me (2007)
3
      2202
                                             Lifeboat (1944)
4
      6460
                              Trial, The (Procès, Le) (1962)
                 genres predicted rating
 Comedy|Drama|Romance 4.170762
0
1
           Crime|Drama
                                 4.099721
2
                 Drama
                                 4.047558
3
              Drama|War
                                 4.037513
                 Drama
                                 4.017401
Tops 5 Recommendations for User 263:
  movieId
                                                       title
                                                                    genres \
     1104
                            Streetcar Named Desire, A (1951)
0
                                                                     Drama
     3200
                                     Last Detail, The (1973) Comedy|Drama
1
   177593 Three Billboards Outside Ebbing, Missouri (2017)
2
                                                             Crime|Drama
                       Guess Who's Coming to Dinner (1967)
3
     3451
                                                                 Drama
     1217
                                                  Ran (1985)
4
                                                               Drama|War
   predicted_rating
0
          4.472169
1
           4.463300
2
          4.460941
           4.454561
3
4
           4.440193
Tops 5 Recommendations for User 264:
  movieId
0
  106642
                         Day of the Doctor, The (2013)
     8132
1
                                     Gladiator (1992)
     6791 Babette's Feast (Babettes gæstebud) (1987)
2
3
     3200
                               Last Detail, The (1973)
                                      Notorious (1946)
      930
4
                       genres predicted rating
0
      Adventure|Drama|Sci-Fi
                                      4.430351
1
                 Action|Drama
                                       4.366071
2
                        Drama
                                       4.363757
3
                 Comedy|Drama
                                       4.362785
  Film-Noir|Romance|Thriller
                                      4.299335
Tops 5 Recommendations for User 265:
  movieId
                                                        title \
0
     1217
                                                   Ran (1985)
1
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
                                            Gladiator (1992)
2
     8132
3
    27156 Neon Genesis Evangelion: The End of Evangelion...
     3200
                                      Last Detail, The (1973)
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genres predicted rating

3

4.395946

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0
                                Drama|War
                                                   4.380217
1
                            Drama|Romance
                                                   4.356369
2
                            Action|Drama
                                                   4.325026
3
  Action | Animation | Drama | Fantasy | Sci-Fi
                                                   4.320052
                            Comedy|Drama
                                                   4.313909
Tops 5 Recommendations for User 266:
  movieId
                                                   title \
0
     1217
                                              Ran (1985)
       858
1
                                   Godfather, The (1972)
2
      2019 Seven Samurai (Shichinin no samurai) (1954)
3
     89904
                                       The Artist (2011)
     1104
                       Streetcar Named Desire, A (1951)
                   genres predicted rating
0
                Drama|War
                                   4.491912
              Crime|Drama
1
                                   4.448520
2
  Action|Adventure|Drama
                                   4.434671
3
                                   4.402863
    Comedy | Drama | Romance
4
                                    4.385980
                    Drama
Tops 5 Recommendations for User 267:
  movieId
                                                          title \
    106642
                                 Day of the Doctor, The (2013)
               Cinema Paradiso (Nuovo cinema Paradiso) (1989)
1
      1172
                                               Lifeboat (1944)
2
      2202
3
     8132
                                              Gladiator (1992)
4
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                   genres predicted rating
  Adventure|Drama|Sci-Fi
                                    4.871574
1
                                   4.863458
                    Drama
2
                                   4.855850
                Drama|War
3
             Action|Drama
                                   4.837674
                Drama|War
                                    4.804628
Tops 5 Recommendations for User 268:
  movieId
                                                          title \
                                             The Artist (2011)
0
    89904
1
     7008
           Last Tango in Paris (Ultimo tango a Parigi) (1...
                                           Mary and Max (2009)
2
     71899
3
      904
                                            Rear Window (1954)
      4226
                                                Memento (2000)
                   genres predicted rating
0
    Comedy|Drama|Romance
                                  4.256698
1
            Drama|Romance
                                   4.101407
2
                                   4.101129
  Animation|Comedy|Drama
3
         Mystery|Thriller
                                   4.085539
         Mystery|Thriller
                                    4.075472
Tops 5 Recommendations for User 269:
  movieId
0
      3451
                          Guess Who's Coming to Dinner (1967)
     27156 Neon Genesis Evangelion: The End of Evangelion...
1
2
     4642
                             Hedwig and the Angry Inch (2000)
                                Trial, The (Procès, Le) (1962)
3
     6460
     2202
                                               Lifeboat (1944)
                                   genres predicted_rating
0
                                    Drama
                                                   4.742583
1
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.700896
2
                    Comedy|Drama|Musical
                                                   4.698455
3
                                    Drama
                                                   4.679964
4
                                Drama|War
                                                   4.652877
Tops 5 Recommendations for User 270:
  movieId
                                                          title \
     2202
                                               Lifeboat (1944)
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
     1178
                                         Paths of Glory (1957)
    177593 Three Billboards Outside Ebbing, Missouri (2017)
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4642
                             Hedwig and the Angry Inch (2000)
                                   genres predicted rating
                                                   4.653395
                               Drama|War
1
  Action | Animation | Drama | Fantasy | Sci-Fi
                                                   4.590447
2
                               Drama|War
                                                   4.551761
3
                             Crime|Drama
                                                   4.477962
4
                    Comedy|Drama|Musical
                                                   4.456701
Tops 5 Recommendations for User 271:
  movieId
                                                         title
                                                                       genres \
0
     2202
                                              Lifeboat (1944)
                                                                    Drama|War
1
     1178
                                         Paths of Glory (1957)
                                                                    Drama|War
2
     1217
                                                    Ran (1985)
                                                                    Drama|War
           Three Billboards Outside Ebbing, Missouri (2017) Crime | Drama
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
  predicted rating
           4.215937
0
1
           4.090066
2
           4.041220
3
           4.018585
           4.015193
Tops 5 Recommendations for User 272:
  movieId
                                                        title
                                                                    genres \
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
     1041
                                        Secrets & Lies (1996)
1
2
      6460
                              Trial, The (Procès, Le) (1962)
                                                                     Drama
3
     1237 Seventh Seal, The (Sjunde inseglet, Det) (1957)
                                                                     Drama
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
  predicted rating
           4.326306
0
           4.163240
1
2
           4.145316
3
           4.121309
           4.119355
4
Tops 5 Recommendations for User 273:
  movieId
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
      1178
                                        Paths of Glory (1957)
      1201 Good, the Bad and the Ugly, The (Buono, il bru...
3
4
      2019
                  Seven Samurai (Shichinin no samurai) (1954)
                                  genres predicted rating
0
             Comedy|Crime|Drama|Thriller
                                                 4.845078
  Action|Animation|Drama|Fantasy|Sci-Fi
2
                               Drama|War
3
                Action | Adventure | Western
                  Action | Adventure | Drama
                                                   4.773343
Tops 5 Recommendations for User 274:
  movieId
                                                        title
                                                                    genres
0
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1041
                                        Secrets & Lies (1996)
2
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
3
      1217
                                                   Ran (1985)
                                                                 Drama|War
      1104
                            Streetcar Named Desire, A (1951)
                                                                     Drama
  predicted rating
           4.290926
0
           4.289130
1
2
           4.283251
3
           4.275579
           4.268656
Tops 5 Recommendations for User 275:
  movieId
                                                         title \
     1178
                                        Paths of Glory (1957)
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1
      2202
                                               Lifeboat (1944)
2
      3266
           Man Bites Dog (C'est arrivé près de chez vous)...
3
    116897
                                             Wild Tales (2014)
    177593
            Three Billboards Outside Ebbing, Missouri (2017)
                        genres predicted rating
0
                     Drama|War
                                        4.892877
1
                     Drama|War
                                        4.884732
2
  Comedy|Crime|Drama|Thriller
                                        4.884687
3
        Comedy|Drama|Thriller
                                        4.834451
4
                   Crime|Drama
                                         4.813684
Tops 5 Recommendations for User 276:
  movieId
                                        title
       50
                  Usual Suspects, The (1995) Crime | Mystery | Thriller
1
      176
                   Living in Oblivion (1995)
                                                               Comedy
2
      246
                          Hoop Dreams (1994)
                                                          Documentary
3
      318 Shawshank Redemption, The (1994)
                                                          Crime|Drama
      475 In the Name of the Father (1993)
                                                                 Drama
  predicted rating
0
1
                  5
2
                  5
3
                  5
                  5
4
Tops 5 Recommendations for User 277:
  movieId
                                                         title \
0
     1217
                                                    Ran (1985)
1
     1104
                             Streetcar Named Desire, A (1951)
2
   106642
                                 Day of the Doctor, The (2013)
3
     51931
                                         Reign Over Me (2007)
4
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
                   genres predicted rating
0
                Drama|War
                                   4.673505
1
                                   4.637197
                    Drama
2
                                   4.625176
  Adventure | Drama | Sci-Fi
3
                    Drama
                                   4.612153
            Drama|Romance
                                    4.610456
Tops 5 Recommendations for User 278:
  movieId
                                                         title \
0
     2202
                                              Lifeboat (1944)
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
      2959
                                             Fight Club (1999)
3
      3451
                          Guess Who's Coming to Dinner (1967)
     1104
                             Streetcar Named Desire, A (1951)
                                   genres predicted rating
                               Drama|War
                                                   4.801708
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.748144
2
                                                   4.709916
             Action|Crime|Drama|Thriller
3
                                    Drama
                                                   4.682531
                                    Drama
                                                   4.672353
Tops 5 Recommendations for User 279:
  movieId
                                                         title \
            Three Billboards Outside Ebbing, Missouri (2017)
0
    177593
1
      1272
                                                 Patton (1970)
2
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
3
     3266 Man Bites Dog (C'est arrivé près de chez vous)...
4
      1104
                             Streetcar Named Desire, A (1951)
                        genres predicted rating
0
                   Crime|Drama
                                        4.273422
1
                     Drama|War
                                        4.242935
2
                     Drama|War
                                        4.240434
3
  Comedy|Crime|Drama|Thriller
                                        4.237353
                                         4.237081
                         Drama
```

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Tops 5 Recommendations for User 280:
  movieId
                                                         title \
0
     2202
                                              Lifeboat (1944)
1
     1217
                                                   Ran (1985)
2
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
3
                             Streetcar Named Desire, A (1951)
     1104
       930
4
                                             Notorious (1946)
                       genres predicted_rating
0
                    Drama|War
                                      4.763354
1
                    Drama|War
                                       4.704779
2
                    Drama|War
                                       4.696852
3
                        Drama
                                       4.681165
  Film-Noir|Romance|Thriller
                                       4.680608
Tops 5 Recommendations for User 281:
  movieId
                                                                     genres \
                                                         title
0
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
     1178
                                        Paths of Glory (1957)
1
                                                                 Drama|War
2
                          Guess Who's Coming to Dinner (1967)
     3451
                                                                       Drama
                                      Last Detail, The (1973) Comedy|Drama
3
     3200
     43376 Sophie Scholl: The Final Days (Sophie Scholl -... Drama|War
  predicted_rating
0
           4.351402
1
           4.311394
2
           4.306769
3
           4.245092
           4.235297
Tops 5 Recommendations for User 282:
  movieId
                                                      title
                                                                   genres
     2202
                                            Lifeboat (1944)
                                                                 Drama|War
1
     1104
                           Streetcar Named Desire, A (1951)
                                                                    Drama
2
     1237 Seventh Seal, The (Sjunde inseglet, Det) (1957)
3
                                    Last Detail, The (1973) Comedy|Drama
     3200
     3451
                        Guess Who's Coming to Dinner (1967)
4
  predicted rating
           4.767477
0
1
           4.687428
2
           4.652728
3
           4.641598
           4.631320
Tops 5 Recommendations for User 283:
  movieId
                                                        title \
0
     2571
                                           Matrix, The (1999)
1
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
2
     2202
                                              Lifeboat (1944)
3
     3266 Man Bites Dog (C'est arrivé près de chez vous)...
     1217
                                                   Ran (1985)
                        genres predicted rating
0
       Action|Sci-Fi|Thriller
                                        4.438714
1
                 Drama|Romance
                                        4.352092
2
                     Drama|War
                                        4.315045
3
  Comedy | Crime | Drama | Thriller
                                        4.310644
                     Drama|War
                                        4.310538
Tops 5 Recommendations for User 284:
  movieId
                                                        title \
0
   177593 Three Billboards Outside Ebbing, Missouri (2017)
1
     8132
                                             Gladiator (1992)
2
    27156 Neon Genesis Evangelion: The End of Evangelion...
3
    43376 Sophie Scholl: The Final Days (Sophie Scholl -...
4
    51931
                                         Reign Over Me (2007)
                                  genres predicted rating
0
                             Crime|Drama
                                                  4.811813
                            Action|Drama
                                                  4.743947
1
 Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.738700
```

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3
                                Drama|War
                                                   4.726068
4
                                    Drama
                                                   4.712228
Tops 5 Recommendations for User 285:
  movieId
                                                         title
      1178
                                         Paths of Glory (1957)
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
3
      6460
                               Trial, The (Procès, Le) (1962)
      2202
4
                                               Lifeboat (1944)
                                   genres predicted rating
0
                                Drama|War
  Action|Animation|Drama|Fantasy|Sci-Fi
2
             Comedy | Crime | Drama | Thriller
                                                   4.491953
3
                                    Drama
                                                   4.458362
                                Drama|War
4
                                                   4.436885
Tops 5 Recommendations for User 286:
   movieId
                                                         title \
      2202
0
                                               Lifeboat (1944)
                               Trial, The (Procès, Le) (1962)
1
      6460
2
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
                             Streetcar Named Desire, A (1951)
3
      1104
       750 Dr. Strangelove or: How I Learned to Stop Worr...
                        genres predicted rating
0
                     Drama|War
                                        4.619553
                                         4.601186
1
                         Drama
  Comedy|Crime|Drama|Thriller
                                        4.565253
3
                         Drama
                                        4.554173
4
                    Comedy|War
                                         4.516565
Tops 5 Recommendations for User 287:
   movieId
                                         Godfather, The (1972)
       858
0
       750 Dr. Strangelove or: How I Learned to Stop Worr...
1
2
                                             The Artist (2011)
     89904
3
      3683
                                           Blood Simple (1984)
      1299
                                    Killing Fields, The (1984)
4
                  genres predicted rating
0
             Crime|Drama
                                3.912551
1
              Comedy|War
                                   3.875815
2
   Comedy|Drama|Romance
                                  3.817400
3
  Crime|Drama|Film-Noir
                                   3.800172
4
               Drama|War
                                   3.786501
Tops 5 Recommendations for User 288:
   movieId
                                                         title \
0
     2202
                                               Lifeboat (1944)
1
     1178
                                         Paths of Glory (1957)
   177593 Three Billboards Outside Ebbing, Missouri (2017)
    27156 Neon Genesis Evangelion: The End of Evangelion...
3
4
     1217
                                                    Ran (1985)
                                   genres predicted rating
0
                                Drama|War
                                                   4.188730
1
                                Drama|War
                                                   4.177282
2
                              Crime|Drama
                                                   4.174579
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.151789
                                Drama|War
                                                   4.141869
Tops 5 Recommendations for User 289:
  movieId
                                                         title \
0
   177593 Three Billboards Outside Ebbing, Missouri (2017)
1
     1104
                             Streetcar Named Desire, A (1951)
2
      6666 Discreet Charm of the Bourgeoisie, The (Charme...
3
     1217
                                                    Ran (1985)
      2202
                                               Lifeboat (1944)
```

genres predicted rating

```
0
            Crime | Drama
                                 4.497243
1
                  Drama
                                 4.479084
2
  Comedy|Drama|Fantasy
                                 4.457349
3
                                 4.452545
              Drama|War
4
              Drama|War
                                 4.408888
Tops 5 Recommendations for User 290:
                                                         title
  movieId
                                                                       genres
0
     1178
                                        Paths of Glory (1957)
                                                                   Drama|War
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                    Drama
2
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
3
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
                                                    Ran (1985)
   predicted rating
0
           4.830468
1
           4.811170
2
           4.759789
3
           4.738186
           4.715451
Tops 5 Recommendations for User 291:
   movieId
                                                         title \
      1041
                                         Secrets & Lies (1996)
1
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
2
      8477
                                              Jetée, La (1962)
    177593
3
           Three Billboards Outside Ebbing, Missouri (2017)
4
     2202
                                               Lifeboat (1944)
                        genres predicted rating
0
                         Drama
                                        5.000000
  Comedy|Crime|Drama|Thriller
                                        5.000000
2
                                        5.000000
                Romance|Sci-Fi
3
                   Crime|Drama
                                        5.000000
                     Drama|War
                                        4.994837
Tops 5 Recommendations for User 292:
   movieId
                                                         title \
    177593
0
            Three Billboards Outside Ebbing, Missouri (2017)
1
      3200
                                      Last Detail, The (1973)
2
       720 Wallace & Gromit: The Best of Aardman Animatio...
3
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
                       genres predicted rating
0
                  Crime|Drama
                                       4.325510
1
                                       4.201960
                 Comedy|Drama
2
                                       4.181818
  Adventure | Animation | Comedy
3
                    Drama|War
                                       4.142453
                Drama|Romance
                                       4.138103
Tops 5 Recommendations for User 293:
  movieId
                                                        title
                                                                    genres \
                                                   Ran (1985)
0
      1217
                                                                Drama|War
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
                              Trial, The (Procès, Le) (1962)
2
     6460
                                              Lifeboat (1944)
3
      2202
                                                                 Drama|War
       246
                                           Hoop Dreams (1994) Documentary
   predicted_rating
0
           4.050921
           4.027694
1
2
           4.000201
3
           3.979141
           3.847047
Tops 5 Recommendations for User 294:
    177593 Three Billboards Outside Ebbing, Missouri (2017)
1
     1178
                                        Paths of Glory (1957)
2
    112552
                                              Whiplash (2014)
3
      246
                                           Hoop Dreams (1994)
```

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62336
                                                  FLCL (2000)
4
                            genres predicted rating
0
                       Crime|Drama
                                            3.899784
1
                         Drama|War
                                            3.866486
2
                             Drama
                                            3.841069
3
                                            3.805366
                       Documentary
  Animation|Comedy|Fantasy|Sci-Fi
                                            3.804833
Tops 5 Recommendations for User 295:
  movieId
                                                         title \
0
     1237
            Seventh Seal, The (Sjunde inseglet, Det) (1957)
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
1
2
     69524
             Raiders of the Lost Ark: The Adaptation (1989)
                             Streetcar Named Desire, A (1951)
     1104
     1178
                                        Paths of Glory (1957)
                      genres predicted rating
0
                                      4.599483
                       Drama
1
                   Drama|War
                                      4.570704
2
  Action|Adventure|Thriller
                                      4.566467
3
                       Drama
                                      4.553040
                   Drama|War
                                      4.517317
Tops 5 Recommendations for User 296:
  movieId
                                                         title \
   177593
0
           Three Billboards Outside Ebbing, Missouri (2017)
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
1
2
      1203
                                           12 Angry Men (1957)
3
     2202
                                              Lifeboat (1944)
     8477
                                              Jetée, La (1962)
                        genres predicted rating
0
                   Crime|Drama
                                        4.808372
  Comedy|Crime|Drama|Thriller
1
                                        4.763392
2
                                        4.726004
                        Drama
3
                                        4.720324
                     Drama|War
4
                Romance | Sci-Fi
                                        4.708940
Tops 5 Recommendations for User 297:
   movieId
                                     title
                                                genres predicted rating
                                             Drama|War
0
      2202
                           Lifeboat (1944)
                                                         4.079877
1
      858
                     Godfather, The (1972) Crime|Drama
                                                                  4.025070
                                           Drama|War
Drama|War
2
      1217
                                Ran (1985)
                                                                  3.921936
3
      1178
                     Paths of Glory (1957)
                                                                  3.915397
      1221 Godfather: Part II, The (1974) Crime|Drama
                                                                  3.906954
Tops 5 Recommendations for User 298:
  movieId
                                                         title \
      1223
            Grand Day Out with Wallace and Gromit, A (1989)
1
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
2
      2202
                                              Lifeboat (1944)
                             Streetcar Named Desire, A (1951)
3
     1104
      246
4
                                           Hoop Dreams (1994)
                                        genres predicted rating
  Adventure | Animation | Children | Comedy | Sci-Fi
0
                                                       3.485727
1
                  Comedy | Crime | Drama | Thriller
                                                        3.473866
2
                                    Drama|War
                                                        3.452366
3
                                        Drama
                                                        3.451214
                                  Documentary
                                                        3.451077
Tops 5 Recommendations for User 299:
  movieId
                                          title
                                                          genres \
0
      3451 Guess Who's Coming to Dinner (1967)
                                                          Drama
      8477
                               Jetée, La (1962) Romance|Sci-Fi
1
2
      3200
                        Last Detail, The (1973)
                                                 Comedy|Drama
3
     1178
                          Paths of Glory (1957)
                                                      Drama|War
     1217
                                     Ran (1985)
                                                      Drama|War
   predicted rating
          4.470616
```

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4.461866
2
           4.451358
3
           4.431020
           4.416604
Tops 5 Recommendations for User 300:
   movieId
                                                         title
                                                                     genres
                                        Paths of Glory (1957)
      1178
0
                                                                  Drama|War
      2202
1
                                              Lifeboat (1944)
                                                                  Drama|War
2
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
3
      1217
                                                   Ran (1985)
                                                                   Drama|War
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
   predicted rating
           4.820646
1
           4.760181
2
           4.709094
3
           4.683373
           4.670118
Tops 5 Recommendations for User 301:
   movieId
                                                          title \
    177593
             Three Billboards Outside Ebbing, Missouri (2017)
1
      2202
                                                Lifeboat (1944)
2
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
3
      8477
                                               Jetée, La (1962)
      1178
4
                                         Paths of Glory (1957)
                         genres predicted rating
0
                   Crime|Drama
                                         4.300574
1
                     Drama|War
                                         4.263532
  Comedy|Crime|Drama|Thriller
                                         4.253419
3
                                         4.235373
                Romance | Sci-Fi
4
                     Drama|War
                                         4.202251
Tops 5 Recommendations for User 302:
   movieId
                                                          title \
      2202
0
                                                Lifeboat (1944)
                                         Paths of Glory (1957)
      1178
1
2
      6460
                                Trial, The (Procès, Le) (1962)
3
    177593
             Three Billboards Outside Ebbing, Missouri (2017)
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                   genres predicted_rating
0
                                Drama|War
                                                   5.000000
1
                                Drama|War
                                                    4.904786
2
                                    Drama
                                                   4.845492
3
                              Crime|Drama
                                                    4.833123
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.827984
Tops 5 Recommendations for User 303:
   movieId
                                              title
0
      8477
                                   Jetée, La (1962)
     65642 Timecrimes (Cronocrímenes, Los) (2007)
1
2
      8132
                                   Gladiator (1992)
3
      930
                                   Notorious (1946)
      2202
                                    Lifeboat (1944)
4
                       genres predicted rating
0
               Romance | Sci-Fi
                                        4.784246
1
              Sci-Fi|Thriller
                                        4.662368
2
                 Action|Drama
                                        4.630573
3
  Film-Noir|Romance|Thriller
                                        4.624051
4
                    Drama|War
                                        4.619792
Tops 5 Recommendations for User 304:
   movieId
                                                          title
0
      3451
                           Guess Who's Coming to Dinner (1967)
1
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
                                                                 Drama|Romance
2
      1104
                              Streetcar Named Desire, A (1951)
                                                                         Drama
3
      246
                                            Hoop Dreams (1994)
                                                                   Documentary
4
      2202
                                                Lifeboat (1944)
                                                                     Drama|War
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1

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predicted rating
0
           4.709252
1
           4.669825
2
           4.644854
3
           4.632429
4
           4.605029
Tops 5 Recommendations for User 305:
  movieId
                                                        title
                                                                      genres \
0
    1041
                                        Secrets & Lies (1996)
                                                                      Drama
   177593 Three Billboards Outside Ebbing, Missouri (2017)
1
                                                                Crime|Drama
                            Streetcar Named Desire, A (1951)
3
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
      3200
                                      Last Detail, The (1973) Comedy | Drama
   predicted rating
0
           4.819771
           4.808394
1
2
           4.791777
3
           4.750723
           4.738462
Tops 5 Recommendations for User 306:
   movieId
                                                                     genres \
                                                        title
0
     2202
                                             Lifeboat (1944)
                                                                 Drama|War
      1104
1
                            Streetcar Named Desire, A (1951)
                                                                     Drama
2
     1178
                                       Paths of Glory (1957)
                                                                 Drama|War
3
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
     1041
                                        Secrets & Lies (1996)
   predicted rating
           4.259531
1
           4.247501
2
           4.203864
3
           4.153433
           4.144186
Tops 5 Recommendations for User 307:
   movieId
      1178
                                         Paths of Glory (1957)
1
      1217
                                                    Ran (1985)
2
      1104
                             Streetcar Named Desire, A (1951)
3
      1223
            Grand Day Out with Wallace and Gromit, A (1989)
      2239 Swept Away (Travolti da un insolito destino ne...
4
                                        genres predicted rating
0
                                     Drama|War
                                                        3.804034
1
                                     Drama|War
                                                        3.751618
2
                                         Drama
                                                        3.730316
  Adventure | Animation | Children | Comedy | Sci-Fi
                                  Comedy|Drama
Tops 5 Recommendations for User 308:
  movieId
                                                         title \
                                             Inside Job (2010)
0
    80906
     81834 Harry Potter and the Deathly Hallows: Part 1 (...
1
2
    177593
            Three Billboards Outside Ebbing, Missouri (2017)
3
      3675
                                        White Christmas (1954)
      1303
                            Man Who Would Be King, The (1975)
                          genres predicted_rating
0
                                           3.729373
                     Documentary
1
  Action|Adventure|Fantasy|IMAX
                                           3.698821
2
                                           3.630028
                     Crime|Drama
3
          Comedy|Musical|Romance
                                           3.589975
                 Adventure|Drama
                                           3.524827
Tops 5 Recommendations for User 309:
  movieId
   177593
            Three Billboards Outside Ebbing, Missouri (2017)
     27156 Neon Genesis Evangelion: The End of Evangelion...
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2
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
3
      1217
                                                    Ran (1985)
4
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
                                  genres predicted_rating
                             Crime|Drama
0
                                                  4.382099
1
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.302804
2
            Comedy|Crime|Drama|Thriller
                                                  4.288886
3
                               Drama|War
                                                   4.288135
4
                           Drama|Romance
                                                   4.271196
Tops 5 Recommendations for User 310:
  movieId
                                                         title \
     3019
                                       Drugstore Cowboy (1989)
   116897
1
                                            Wild Tales (2014)
      720 Wallace & Gromit: The Best of Aardman Animatio...
                                        Paths of Glory (1957)
3
     1178
4
      2132
                       Who's Afraid of Virginia Woolf? (1966)
                       genres predicted rating
0
                  Crime|Drama
                                       4.609914
1
       Comedy|Drama|Thriller
                                       4.605748
  Adventure|Animation|Comedy
                                       4.518248
3
                    Drama|War
                                       4.501158
4
                        Drama
                                       4.487879
Tops 5 Recommendations for User 311:
  movieId
                                                         title \
0
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
1
      6460
                               Trial, The (Procès, Le) (1962)
2
     89904
                                            The Artist (2011)
3
     4642
                             Hedwig and the Angry Inch (2000)
     1217
                                                    Ran (1985)
                 genres predicted rating
0
              Drama|War
                                 3.405377
                                 3.394093
1
                 Drama
2
                                 3.373248
  Comedy | Drama | Romance
3
  Comedy|Drama|Musical
                                 3.367972
              Drama|War
                                 3.346343
Tops 5 Recommendations for User 312:
  movieId
                                                         title \
    27156 Neon Genesis Evangelion: The End of Evangelion...
0
                                                    Ran (1985)
1
     1217
2
     1104
                             Streetcar Named Desire, A (1951)
3
     2202
                                              Lifeboat (1944)
      858
4
                                        Godfather, The (1972)
                                  genres predicted rating
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.578037
1
                               Drama|War
                                                  4.535884
2
                                   Drama
                                                  4.513395
3
                               Drama|War
                                                   4.502412
4
                             Crime | Drama
                                                   4.489077
Tops 5 Recommendations for User 313:
  movieId
                                                         title \
0
      6460
                               Trial, The (Procès, Le) (1962)
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
1
2
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
3
      6666 Discreet Charm of the Bourgeoisie, The (Charme...
      2202
4
                                               Lifeboat (1944)
                        genres predicted_rating
0
                         Drama
                                        4.626595
1
                     Drama|War
                                        4.525978
  Comedy|Crime|Drama|Thriller
                                        4.503483
3
          Comedy|Drama|Fantasy
                                        4.481198
4
                     Drama|War
                                        4.466063
Tops 5 Recommendations for User 314:
```

```
movieId
                                                        title \
0
   177593
            Three Billboards Outside Ebbing, Missouri (2017)
1
     1178
                                        Paths of Glory (1957)
2
      1104
                             Streetcar Named Desire, A (1951)
3
    27156 Neon Genesis Evangelion: The End of Evangelion...
      1041
                                        Secrets & Lies (1996)
                                  genres predicted rating
0
                             Crime|Drama 4.132082
1
                                                  4.096059
                               Drama|War
2
                                                  4.087972
                                   Drama
3
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.077678
                                                  4.047792
Tops 5 Recommendations for User 315:
  movieId
0
      3451
                         Guess Who's Coming to Dinner (1967)
1
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
2
     1178
                                        Paths of Glory (1957)
     2202
                                              Lifeboat (1944)
3
      930
4
                                             Notorious (1946)
                       genres predicted rating
0
                        Drama
                                       4.090222
                Drama|Romance
                                       4.041527
1
2
                    Drama|War
                                       4.027229
3
                    Drama|War
                                       4.026509
  Film-Noir|Romance|Thriller
                                       4.014255
Tops 5 Recommendations for User 316:
  movieId
                                                        title \
0
     1217
                                                   Ran (1985)
1
     1178
                                        Paths of Glory (1957)
2
    27156 Neon Genesis Evangelion: The End of Evangelion...
3
      904
                                           Rear Window (1954)
     1248
                                         Touch of Evil (1958)
4
                                  genres predicted_rating
0
                               Drama|War
                                                  4.000547
1
                               Drama|War
                                                  3.988619
2
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  3.969633
                        Mystery|Thriller
3
                                                  3.943865
4
                Crime|Film-Noir|Thriller
                                                  3.943555
Tops 5 Recommendations for User 317:
  movieId
                                                        title \
0
     1104
                            Streetcar Named Desire, A (1951)
     27156 Neon Genesis Evangelion: The End of Evangelion...
1
2
     2019 Seven Samurai (Shichinin no samurai) (1954)
3
     6104
             Monty Python Live at the Hollywood Bowl (1982)
     1204
                                    Lawrence of Arabia (1962)
                                  genres predicted rating
0
                                                  4.357404
                                   Drama
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.334408
2
                  Action|Adventure|Drama
                                                  4.312016
3
                                  Comedy
                                                  4.299476
                     Adventure|Drama|War
                                                  4.298074
Tops 5 Recommendations for User 318:
  movieId
                                                                 genres \
                                                        title
0
     1178
                                        Paths of Glory (1957) Drama|War
      1104
1
                             Streetcar Named Desire, A (1951)
2
     1217
                                                   Ran (1985) Drama|War
3
     43376 Sophie Scholl: The Final Days (Sophie Scholl -... Drama|War
     2202
                                              Lifeboat (1944) Drama|War
   predicted rating
0
           4.489742
1
           4.487174
2
           4.443738
3
           4.430307
```

```
Tops 5 Recommendations for User 319:
   movieId
                                                         title \
      2202
                                               Lifeboat (1944)
    177593
             Three Billboards Outside Ebbing, Missouri (2017)
1
2
     4642
                             Hedwig and the Angry Inch (2000)
3
     51931
                                          Reign Over Me (2007)
4
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
                 genres predicted rating
0
              Drama|War
                                4.948509
1
            Crime|Drama
                                 4.923406
2
  Comedy|Drama|Musical
                                 4.908055
3
                  Drama
                                 4.899047
          Drama|Romance
                                  4.881346
Tops 5 Recommendations for User 320:
   movieId
                                                        title \
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
1
      3451
                         Guess Who's Coming to Dinner (1967)
2
      1041
                                        Secrets & Lies (1996)
                                         Touch of Evil (1958)
3
      1248
      7121
                                            Adam's Rib (1949)
                     genres predicted_rating
0
                Crime|Drama
                                     4.363123
1
                      Drama
                                      4.316296
2
                      Drama
                                     4.289231
3
  Crime|Film-Noir|Thriller
                                     4.266492
             Comedy|Romance
                                      4.261736
Tops 5 Recommendations for User 321:
  movieId
                                                         title
                                                                     genres
      2202
                                               Lifeboat (1944)
                                                                  Drama|War
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
    177593
           Three Billboards Outside Ebbing, Missouri (2017) Crime | Drama
2
      2360
                             Celebration, The (Festen) (1998)
3
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                                                 Drama|War
   predicted_rating
0
           4.477356
1
           4.442023
2
           4.401594
3
           4.391327
           4.381679
Tops 5 Recommendations for User 322:
  movieId
    27156 Neon Genesis Evangelion: The End of Evangelion...
1
     1104
                             Streetcar Named Desire, A (1951)
2
   106642
                                 Day of the Doctor, The (2013)
                                       Last Detail, The (1973)
3
     3200
      2202
                                               Lifeboat (1944)
4
                                   genres predicted rating
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.134257
1
                                    Drama
                                                   4.129439
2
                  Adventure | Drama | Sci-Fi
                                                   4.128548
3
                            Comedy|Drama
                                                   4.105640
                                Drama|War
                                                   4.075310
Tops 5 Recommendations for User 323:
  movieId
                                                         title \
0
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
1
      1104
                             Streetcar Named Desire, A (1951)
2
     1178
                                         Paths of Glory (1957)
3
     27156 Neon Genesis Evangelion: The End of Evangelion...
      6460
                               Trial, The (Procès, Le) (1962)
                                   genres predicted rating
```

Crime|Drama

4.165005

4

0

```
1
                                   Drama
                                                  4.129402
                               Drama|War
                                                  4.107788
3
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.061977
                                   Drama
                                                  4.028523
Tops 5 Recommendations for User 324:
  movieId
                                                        title \
     1178
0
                                        Paths of Glory (1957)
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
1
2
     1217
                                                   Ran (1985)
3
      905
                                 It Happened One Night (1934)
     1204
                                    Lawrence of Arabia (1962)
                        genres predicted rating
0
                     Drama|War
                                        4.382794
  Comedy|Crime|Drama|Thriller
1
                                        4.321658
2
                     Drama|War
                                        4.274779
3
                Comedy | Romance
                                        4.260738
           Adventure|Drama|War
                                        4.250625
Tops 5 Recommendations for User 325:
   movieId
                                       title
                                                     genres predicted_rating
                                                  Drama|War
      2202
                             Lifeboat (1944)
                                                                      4.488890
1
      1178
                       Paths of Glory (1957)
                                                   Drama|War
                                                                      4.472425
2
      1104 Streetcar Named Desire, A (1951)
                                                                      4.469146
                                                   Drama
                                                                      4.423007
3
      8477
                            Jetée, La (1962) Romance|Sci-Fi
      6460
            Trial, The (Procès, Le) (1962)
                                                       Drama
                                                                       4.396220
Tops 5 Recommendations for User 326:
  movieId
                                                        title
                                                                      genres \
0
     6460
                               Trial, The (Procès, Le) (1962)
1
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime | Drama
2
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
                             Streetcar Named Desire, A (1951)
3
     1104
     1178
                                        Paths of Glory (1957)
                                                                  Drama|War
   predicted rating
           4.760099
0
           4.713962
1
2
           4.687063
3
           4.674724
           4.673064
Tops 5 Recommendations for User 327:
  movieId
                                                        title \
0
     1217
                                                   Ran (1985)
1
     87234
                                             Submarine (2010)
2
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
     1683
3
                                Wings of the Dove, The (1997)
      1949
                                Man for All Seasons, A (1966)
                 genres predicted rating
0
             Drama|War
                                4.976959
  Comedy|Drama|Romance
                                4.933826
1
2
          Drama|Romance
                                4.910647
3
          Drama|Romance
                                 4.909769
4
                  Drama
                                 4.902591
Tops 5 Recommendations for User 328:
   movieId
                                                         title \
    27156 Neon Genesis Evangelion: The End of Evangelion...
1
     6460
                               Trial, The (Procès, Le) (1962)
2
     59141
                                         Son of Rambow (2007)
3
     1178
                                        Paths of Glory (1957)
4
     87234
                                             Submarine (2010)
                                  genres predicted rating
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.050355
1
                                   Drama
                                                  4.041624
2
                   Children | Comedy | Drama
                                                  3.998728
3
                               Drama|War
                                                  3.972218
4
                    Comedy|Drama|Romance
                                                  3.956907
```

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Tops 5 Recommendations for User 329:
   movieId
                                                       title \
      1172
           Cinema Paradiso (Nuovo cinema Paradiso) (1989)
                     Ice Age: The Great Egg-Scapade (2016)
1
    156025
2
                           Streetcar Named Desire, A (1951)
      1104
3
      3090
                                              Matewan (1987)
4
      3341
                                      Born Yesterday (1950)
                                 genres predicted rating
0
                                                 3.656010
                                  Drama
1
  Adventure | Animation | Children | Comedy
                                                  3.636200
2
                                  Drama
                                                  3.632921
3
                                  Drama
                                                  3.626271
                                 Comedy
                                                  3.624878
Tops 5 Recommendations for User 330:
   movieId
                                                         title
                                                                      genres \
0
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
      1178
                                        Paths of Glory (1957)
1
                                                                  Drama|War
    2202 Lifeboat (1944) Drama|War
177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
2
3
      1041
                                        Secrets & Lies (1996)
   predicted_rating
0
           4.551287
1
           4.493221
2
           4.444489
3
           4.431098
           4.410356
Tops 5 Recommendations for User 331:
  movieId
                                                           title \
     1178
0
                                         Paths of Glory (1957)
1
      2202
                                               Lifeboat (1944)
2
       750 Dr. Strangelove or: How I Learned to Stop Worr...
3
     51931
                                          Reign Over Me (2007)
      2019
                  Seven Samurai (Shichinin no samurai) (1954)
4
                   genres predicted rating
0
                Drama|War
                                    4.537027
1
                Drama|War
                                    4.531266
2
               Comedy|War
                                    4.499663
3
                                    4.476047
                    Drama
  Action|Adventure|Drama
                                    4.458066
Tops 5 Recommendations for User 332:
  movieId
                                                         title
                                                                       genres \
0
     1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
1
     2202
                                              Lifeboat (1944)
                                                                   Drama|War
2
                                        Paths of Glory (1957)
                                                                  Drama|War
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
     3200
                                      Last Detail, The (1973) Comedy|Drama
   predicted rating
           4.341486
0
1
           4.335433
2
           4.301141
3
           4.286968
           4.262527
Tops 5 Recommendations for User 333:
  movieId
                                                          title \
0
      2202
                                                Lifeboat (1944)
      1217
1
                                                     Ran (1985)
2
      969
                                     African Queen, The (1951)
3
      6460
                                Trial, The (Procès, Le) (1962)
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
                          genres predicted rating
0
                       Drama|War
                                          4.009257
1
                       Drama|War
                                          3.936533
```

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Adventure | Comedy | Romance | War
3
                          Drama
                                          3.840112
4
    Comedy|Crime|Drama|Thriller
                                          3.836973
Tops 5 Recommendations for User 334:
  movieId
                                                        title \
0
    1104
                            Streetcar Named Desire, A (1951)
   177593 Three Billboards Outside Ebbing, Missouri (2017)
1
     1041
2
                                        Secrets & Lies (1996)
3
     1217
                                                   Ran (1985)
      930
                                             Notorious (1946)
4
                       genres predicted rating
0
                                        4.090867
                        Drama
1
                                       4.077471
                  Crime | Drama
2
                        Drama
                                       4.063430
3
                    Drama|War
                                       4.050155
  Film-Noir|Romance|Thriller
                                        4.050154
Tops 5 Recommendations for User 335:
  movieId
0
    51931
                                        Reign Over Me (2007)
                                       Paths of Glory (1957)
1
      1178
      1223 Grand Day Out with Wallace and Gromit, A (1989)
                                       Secrets & Lies (1996)
3
      1041
4
     1217
                                                  Ran (1985)
                                        genres predicted rating
0
                                         Drama
                                                        4.709707
1
                                     Drama|War
                                                        4.673376
  Adventure | Animation | Children | Comedy | Sci-Fi
                                                        4.662320
3
                                                        4.647297
                                         Drama
4
                                     Drama|War
                                                        4.645525
Tops 5 Recommendations for User 336:
  movieId
                                                        title
                                                                    genres
      1178
                                        Paths of Glory (1957)
0
                                                                  Drama|War
                            Streetcar Named Desire, A (1951)
      1104
1
   177593 Three Billboards Outside Ebbing, Missouri (2017)
2
                                                               Crime|Drama
                                                               Drama|War
3
     1217
                                                  Ran (1985)
4
     1041
                                        Secrets & Lies (1996)
  predicted_rating
0
           4.883972
           4.879325
1
2
           4.876712
3
           4.843651
           4.826310
Tops 5 Recommendations for User 337:
                                        title
  movieId
                                                                    genres \
       246
                          Hoop Dreams (1994)
                                                               Documentary
1
      930
                            Notorious (1946) Film-Noir|Romance|Thriller
2
                       Secrets & Lies (1996)
      1041
                                                                     Drama
3
     1104 Streetcar Named Desire, A (1951)
                                                                     Drama
      1217
                                   Ran (1985)
                                                                 Drama|War
  predicted rating
0
                  5
1
                  5
2
                  5
                  5
3
                  5
Tops 5 Recommendations for User 338:
  movieId
                                                          title \
0
     1178
                                         Paths of Glory (1957)
1
     1248
                                         Touch of Evil (1958)
      6666 Discreet Charm of the Bourgeoisie, The (Charme...
3
      750 Dr. Strangelove or: How I Learned to Stop Worr...
      6460
                                Trial, The (Procès, Le) (1962)
```

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genres predicted rating
                  Drama|War
                                      4.109776
1
  Crime|Film-Noir|Thriller
                                      4.057935
2
       Comedy | Drama | Fantasy
                                      4.007465
3
                 Comedy|War
                                      3.992708
                       Drama
                                      3.987062
Tops 5 Recommendations for User 339:
   movieId
                                                                         genres \
                                        title
Ω
                                   Ran (1985)
      1217
                                                                      Drama|War
1
      1104 Streetcar Named Desire, A (1951)
                                                                         Drama
2
       246
                          Hoop Dreams (1994)
                                                                    Documentary
3
      2202
                              Lifeboat (1944)
                                                                      Drama|War
       933
                     To Catch a Thief (1955) Crime|Mystery|Romance|Thriller
   predicted rating
0
           4.675254
1
           4.674664
2
           4.661146
3
           4.610220
           4.595744
Tops 5 Recommendations for User 340:
                                                                       genres \
   movieId
                                                         title
0
      3200
                                      Last Detail, The (1973) Comedy|Drama
                                                                Crime|Drama
1
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                               Lifeboat (1944)
2
      2202
                                                                   Drama|War
3
      1178
                                         Paths of Glory (1957)
                                                                   Drama|War
      3451
4
                          Guess Who's Coming to Dinner (1967)
                                                                       Drama
   predicted rating
0
           5.000000
           4.973622
1
2
           4.956570
3
           4.943534
           4.935921
4
Tops 5 Recommendations for User 341:
   movieId
                                                         title
                                                                     genres
      2202
0
                                               Lifeboat (1944)
                                                                  Drama|War
1
      1217
                                                    Ran (1985)
                                                                  Drama|War
    177593 Three Billboards Outside Ebbing, Missouri (2017)
2
                                                                Crime|Drama
3
      3019
                                      Drugstore Cowboy (1989)
                                                               Crime|Drama
4
      1104
                             Streetcar Named Desire, A (1951)
   predicted_rating
0
           4.869029
1
           4.806339
2
           4.797249
3
           4.777116
           4.765707
Tops 5 Recommendations for User 342:
   movieId
0
      6460
                                Trial, The (Procès, Le) (1962)
      1178
1
                                         Paths of Glory (1957)
                                       Last Detail, The (1973)
2
      3200
3
                              Celebration, The (Festen) (1998)
      2360
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                   genres predicted rating
0
                                                    4.126171
                                    Drama
                                Drama|War
                                                    4.084861
1
2
                                                    4.061702
                             Comedy|Drama
3
                                                    4.061411
                                    Drama
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.046850
Tops 5 Recommendations for User 343:
   movieId
                                                         title
                                                                         genres
      2202
                                               Lifeboat (1944)
                                                                     Drama|War
1
      1217
                                                    Ran (1985)
                                                                     DramalWar
2
      8477
                                              Jetée, La (1962) Romance | Sci-Fi
```

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3
                            Streetcar Named Desire, A (1951)
      1104
                                                                         Drama
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
   predicted_rating
0
           4.621184
1
           4.575816
2
           4.547094
3
           4.541953
4
           4.540814
Tops 5 Recommendations for User 344:
  movieId
                                                         title \
       176
                                    Living in Oblivion (1995)
1
   106642
                                 Day of the Doctor, The (2013)
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
     3675
                                       White Christmas (1954)
4
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                   genres predicted rating
0
                                   Comedy
                                                   4.723752
1
                  Adventure|Drama|Sci-Fi
                                                   4.695239
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.674262
3
                  Comedy | Musical | Romance
                                                   4.651317
4
                                Drama|War
                                                   4.627023
Tops 5 Recommendations for User 345:
                                                                     genres \
  movieId
                                                        title
0
    26810
                                         Bad Boy Bubby (1993)
                                                                      Drama
1
     2202
                                             Lifeboat (1944)
                                                                   Drama|War
2
      3451
                         Guess Who's Coming to Dinner (1967)
                                                                       Drama
3
      3200
                                      Last Detail, The (1973) Comedy|Drama
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
   predicted rating
0
           4.714359
           4.679677
1
2
           4.648500
3
           4.638028
4
           4.633749
Tops 5 Recommendations for User 346:
   movieId
                                                        title
                                                                    genres \
0
     2202
                                              Lifeboat (1944)
                                                                 Drama|War
1
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
2
      1178
                                        Paths of Glory (1957)
                                                               Drama|War
3
      1217
                                                   Ran (1985)
                                                                 Drama|War
4
      6460
                              Trial, The (Procès, Le) (1962)
                                                                    Drama
   predicted rating
0
           4.289708
1
           4.273185
2
           4.271828
3
           4.249477
           4.211843
Tops 5 Recommendations for User 347:
  movieId
                                           title
                                                                   genres
                  Day of the Doctor, The (2013) Adventure | Drama | Sci-Fi
0
    106642
      3451 Guess Who's Coming to Dinner (1967)
1
2
      3200
                        Last Detail, The (1973)
                                                           Comedy|Drama
3
      8477
                               Jetée, La (1962)
                                                          Romance|Sci-Fi
                               Gladiator (1992)
                                                            Action|Drama
      8132
   predicted rating
           4.414107
0
           4.408033
1
2
           4.373859
3
           4.337273
           4.312986
Tops 5 Recommendations for User 348:
  movieId
                                                  title
                                                                   genres \
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741 Ghost in the Shell (Kôkaku kidôtai) (1995) Animation|Sci-Fi
0
1
      1104
                    Streetcar Named Desire, A (1951)
2
      1178
                                 Paths of Glory (1957)
                                                              Drama|War
3
      1217
                                            Ran (1985)
                                                               Drama|War
      2202
                                       Lifeboat (1944)
                                                               Drama|War
   predicted_rating
0
                  5
                  5
1
2
                  5
3
                  5
                  5
4
Tops 5 Recommendations for User 349:
   movieId
                                                       title \
                                             Lifeboat (1944)
     2202
1
   177593 Three Billboards Outside Ebbing, Missouri (2017)
2
    3200
                                     Last Detail, The (1973)
                               Day of the Doctor, The (2013)
3
    106642
    6791
4
                Babette's Feast (Babettes gæstebud) (1987)
                   genres predicted_rating
0
                Drama|War
                                   4.638595
1
              Crime|Drama
                                   4.612671
2
             Comedy|Drama
                                   4.575345
3
  Adventure|Drama|Sci-Fi
                                   4.556565
4
                    Drama
                                   4.545993
Tops 5 Recommendations for User 350:
  movieId
                                                         title \
0
      3200
                                      Last Detail, The (1973)
1
    106642
                                Day of the Doctor, The (2013)
2
     3451
                          Guess Who's Coming to Dinner (1967)
3
     2202
                                              Lifeboat (1944)
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
                   genres predicted rating
0
                                  4.239609
             Comedy|Drama
1
   Adventure | Drama | Sci-Fi
                                   4.233709
2
                   Drama
                                   4.220506
3
                Drama|War
                                   4.214997
            Drama|Romance
                                   4.182239
Tops 5 Recommendations for User 351:
               title genres predicted_rating
Streetcar Named Desire, A (1951) Drama 4.464201
  movieId
    1104
0
1
     1178
                         Paths of Glory (1957) Drama|War
                                                                    4.454136
2
     2202
                               Lifeboat (1944) Drama|War
                                                                    4.442932
3
      3451 Guess Who's Coming to Dinner (1967)
                                                Drama
                                                                    4.403961
                                     Ran (1985) Drama|War
Tops 5 Recommendations for User 352:
  movieId
                                                        title \
     2202
0
                                              Lifeboat (1944)
1
     1104
                             Streetcar Named Desire, A (1951)
2
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
                      Timecrimes (Cronocrímenes, Los) (2007)
     65642
     5500
                                           Top Secret! (1984)
                                  genres predicted_rating
                               Drama|War
0
                                                  4.696133
1
                                   Drama
                                                  4.598364
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.536585
3
                                                  4.534569
                         Sci-Fi|Thriller
4
                                                  4.491559
                                  Comedy
Tops 5 Recommendations for User 353:
  movieId
     1178
                                        Paths of Glory (1957)
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
     51931
                                         Reign Over Me (2007)
3
     2360
                             Celebration, The (Festen) (1998)
```

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6460
                                Trial, The (Procès, Le) (1962)
                                   genres predicted rating
                                                   4.770187
                                Drama|War
1
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.761435
2
                                    Drama
                                                   4.636411
3
                                                   4.563696
                                    Drama
4
                                    Drama
                                                   4.563105
Tops 5 Recommendations for User 354:
  movieId
                                                        title
                                                                    genres
0
     2202
                                              Lifeboat (1944)
                                                                  Drama|War
1
     1104
                            Streetcar Named Desire, A (1951)
                                                                     Drama
2
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                                        Paths of Glory (1957)
     1178
                                                                 Drama|War
     1041
                                        Secrets & Lies (1996)
                                                                     Drama
  predicted rating
0
           4.522118
1
           4.503217
2
           4.496988
3
           4.482824
           4.431291
Tops 5 Recommendations for User 355:
  movieId
                                                                         genres \
                                                         title
0
      1178
                                         Paths of Glory (1957)
                                                                     Drama|War
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                          Drama
2
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                                                     Drama|War
3
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                   Crime|Drama
     8477
                                              Jetée, La (1962) Romance | Sci-Fi
  predicted rating
0
           4.702352
           4.699102
1
2
           4.670523
3
           4.663271
           4.567955
4
Tops 5 Recommendations for User 356:
  movieId
                                                         title \
                                         Paths of Glory (1957)
0
      1178
1
      1104
                              Streetcar Named Desire, A (1951)
2
     6460
                               Trial, The (Procès, Le) (1962)
3
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
    27156 Neon Genesis Evangelion: The End of Evangelion...
                                   genres predicted rating
0
                                Drama|War
                                                  4.735655
1
                                   Drama
                                                   4.718467
2
                                    Drama
                                                   4.704754
                              Crime | Drama
                                                   4.690678
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.684047
Tops 5 Recommendations for User 357:
  movield
                                                         title \
0
     1178
                                         Paths of Glory (1957)
1
      2202
                                               Lifeboat (1944)
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
            Three Billboards Outside Ebbing, Missouri (2017)
3
    177593
     1217
                                                    Ran (1985)
                                   genres predicted rating
0
                                Drama|War
                                                   4.640601
1
                                Drama|War
                                                   4.634314
2
                                                   4.611517
  Action|Animation|Drama|Fantasy|Sci-Fi
3
                              Crime|Drama
                                                   4.606293
4
                                Drama|War
                                                   4.561051
Tops 5 Recommendations for User 358:
  movieId
                                                         title \
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
```

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1
     1104
                             Streetcar Named Desire, A (1951)
2
     27397
           Joint Security Area (Gongdong gyeongbi guyeok ...
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
4
                                      Schindler's List (1993)
                                  genres predicted rating
0
                           Drama|Romance
                                                  4.523929
1
                                   Drama
                                                  4.521020
2
       Crime|Drama|Mystery|Thriller|War
                                                  4.511182
3
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.491323
                                                  4.489820
                               Drama|War
Tops 5 Recommendations for User 359:
  movieId
                                          title
                                                                  genres
     2202
                                Lifeboat (1944)
                                                               Drama|War
              Streetcar Named Desire, A (1951)
1
     1104
2
   106642
           Day of the Doctor, The (2013) Adventure|Drama|Sci-Fi
3
      3451 Guess Who's Coming to Dinner (1967)
     3200
                        Last Detail, The (1973)
                                                            Comedy | Drama
  predicted rating
0
           4.269554
1
           4.269073
2
           4.263607
3
           4.259451
           4.226932
Tops 5 Recommendations for User 360:
  movieId
                                                         title \
0
     1204
                                    Lawrence of Arabia (1962)
1
     6460
                               Trial, The (Procès, Le) (1962)
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
3
    27156 Neon Genesis Evangelion: The End of Evangelion...
4
      933
                                      To Catch a Thief (1955)
                                  genres predicted rating
0
                     Adventure|Drama|War
                                                  4.854046
1
                                   Drama
                                                   4.840416
2
                             Crime | Drama
                                                  4.751520
3
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.745814
          Crime|Mystery|Romance|Thriller
Tops 5 Recommendations for User 361:
  movieId
                                                         title \
     3451
0
                          Guess Who's Coming to Dinner (1967)
   106642
1
                                Day of the Doctor, The (2013)
2
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
3
     7121
                                            Adam's Rib (1949)
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                   genres predicted rating
                    Drama
                                   4.096542
1
  Adventure|Drama|Sci-Fi
                                   4.092276
2
                                   4.064108
             Crime|Drama
3
           Comedy|Romance
                                   4.025499
                Drama|War
                                   4.008558
Tops 5 Recommendations for User 362:
  movieId
                                                         title \
0
   177593
             Three Billboards Outside Ebbing, Missouri (2017)
1
      2202
                                               Lifeboat (1944)
                                        Paths of Glory (1957)
2
     1178
3
     1217
                                                    Ran (1985)
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                  genres predicted rating
0
                             Crime|Drama
                                                  4.852358
1
                               Drama|War
                                                  4.839739
2
                               Drama|War
3
                               Drama|War
                                                  4.807733
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.805640
```

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movieId
0
      3451
                           Guess Who's Coming to Dinner (1967)
1
    177593
            Three Billboards Outside Ebbing, Missouri (2017)
2
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
      1104
                              Streetcar Named Desire, A (1951)
      8477
4
                                              Jetée, La (1962)
                                   genres predicted_rating
0
                                                   4.304397
                                    Drama
1
                                                    4.219305
                              Crime|Drama
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.216068
3
                                    Drama
                           Romance|Sci-Fi
Tops 5 Recommendations for User 364:
   movieId
                                                         title
                                                                         genres \
0
     1041
                                        Secrets & Lies (1996)
                                                                          Drama
1
     1104
                             Streetcar Named Desire, A (1951)
                                                                          Drama
    8132 Gladiator (1992)
177593 Three Billboards Outside Ebbing, Missouri (2017)
2
                                                                  Action|Drama
3
                                                                  Crime|Drama
                                              Jetée, La (1962) Romance | Sci-Fi
     8477
   predicted_rating
0
            5.00000
1
            5.00000
2
            5.00000
3
            5.00000
            4.99282
Tops 5 Recommendations for User 365:
   movieId
                                                          title \
                                          Bad Boy Bubby (1993)
     26810
1
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
2
      3435
                                       Double Indemnity (1944)
3
      928
                                                Rebecca (1940)
                                         Secrets & Lies (1996)
      1041
4
                            genres predicted rating
0
                             Drama
                                            3.775218
1
                    Drama|Romance
                                            3.699213
2
            Crime | Drama | Film-Noir
                                            3.697884
3
  Drama | Mystery | Romance | Thriller
                                            3.686988
                                            3.686361
                             Drama
Tops 5 Recommendations for User 366:
  movieId
                                                          title \
     2202
0
                                               Lifeboat (1944)
    27156 Neon Genesis Evangelion: The End of Evangelion...
1
2
                                         Paths of Glory (1957)
3
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                              Shawshank Redemption, The (1994)
                                   genres predicted rating
0
                                Drama|War
                                                   4.583937
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.534623
2
                                Drama|War
                                                    4.524528
3
                              Crime|Drama
4
                              Crime|Drama
Tops 5 Recommendations for User 367:
   movieId
                                                       title \
                        Guess Who's Coming to Dinner (1967)
0
     3451
      6791
1
                Babette's Feast (Babettes gæstebud) (1987)
2
    106642
                              Day of the Doctor, The (2013)
3
     1204
                                  Lawrence of Arabia (1962)
      1172 Cinema Paradiso (Nuovo cinema Paradiso) (1989)
                   genres predicted rating
0
                                    4.936389
                    Drama
1
                    Drama
                                    4.802308
  Adventure | Drama | Sci-Fi
                                    4.750156
```

Tops 5 Recommendations for User 363:

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4
                    Drama
                                    4.718342
Tops 5 Recommendations for User 368:
                                                          title \
  movieId
      1217
                                                    Ran (1985)
1
     1178
                                         Paths of Glory (1957)
2
    27156 Neon Genesis Evangelion: The End of Evangelion...
3
     1104
                              Streetcar Named Desire, A (1951)
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                   genres predicted rating
0
                                Drama|War
                                                   3.956896
1
                                Drama|War
                                                   3.948278
  Action | Animation | Drama | Fantasy | Sci-Fi
                                                   3.923405
3
                                    Drama
                                                   3.918450
4
                              Crime|Drama
                                                   3.868130
Tops 5 Recommendations for User 369:
  movieId
                                                          title
                                                                       genres
                                Trial, The (Procès, Le) (1962)
0
      6460
                                                                        Drama
1
      1217
                                                    Ran (1985)
                                                                    Drama|War
2
      1104
                              Streetcar Named Desire, A (1951)
                                                                        Drama
                                       Last Detail, The (1973) Comedy|Drama
3
      3200
      2239 Swept Away (Travolti da un insolito destino ne... Comedy|Drama
  predicted rating
0
           4.163913
1
           4.144410
2
           4.136952
3
           4.125671
           4.119887
Tops 5 Recommendations for User 370:
  movieId
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
0
           Three Billboards Outside Ebbing, Missouri (2017)
    177593
1
2
                               Trial, The (Procès, Le) (1962)
     6460
3
                                              Notorious (1946)
       930
    106642
                                 Day of the Doctor, The (2013)
4
                        genres predicted rating
0
  Comedy|Crime|Drama|Thriller
                                         4.243072
1
                   Crime|Drama
                                         4.237270
2
                         Drama
                                         4.220884
3
   Film-Noir|Romance|Thriller
                                         4.189943
       Adventure|Drama|Sci-Fi
                                         4.188062
Tops 5 Recommendations for User 371:
  movieId
                                                                    genres
0
       246
                          Hoop Dreams (1994)
                                                               Documentary
1
       318 Shawshank Redemption, The (1994)
                                                               Crime | Drama
2
       527
                     Schindler's List (1993)
                                                                 Drama|War
3
       858
                       Godfather, The (1972)
                                                               Crime | Drama
                            Notorious (1946) Film-Noir|Romance|Thriller
4
      930
  predicted rating
0
                  5
                  5
1
2
                  5
3
                  5
                  5
Tops 5 Recommendations for User 372:
  movieId
                                                          title \
0
     27156 Neon Genesis Evangelion: The End of Evangelion...
1
     1217
                                                    Ran (1985)
2
     51931
                                          Reign Over Me (2007)
3
     2202
                                               Lifeboat (1944)
     7121
                                             Adam's Rib (1949)
```

genres predicted rating

4.742801

3

Adventure | Drama | War

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Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.262628
1
                                Drama|War
                                                   4.262561
2
                                    Drama
                                                   4.226238
3
                                Drama|War
                                                   4.207993
4
                           Comedy | Romance
                                                   4.169607
Tops 5 Recommendations for User 373:
  movieId
                                                         title \
    27156 Neon Genesis Evangelion: The End of Evangelion...
0
1
     1217
                                                    Ran (1985)
2
     1178
                                         Paths of Glory (1957)
3
     1221
                                Godfather: Part II, The (1974)
       858
                                         Godfather, The (1972)
                                   genres predicted rating
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.406464
1
                                Drama|War
                                                   4.378569
2
                                Drama|War
                                                   4.371896
3
                              Crime|Drama
                                                   4.362858
4
                              Crime|Drama
                                                   4.362646
Tops 5 Recommendations for User 374:
  movieId
                                              title
                                                               genres \
      8132
                                   Gladiator (1992)
                                                        Action|Drama
1
      3451
               Guess Who's Coming to Dinner (1967)
                                                                Drama
2
     2202
                                    Lifeboat (1944)
                                                            Drama|War
3
     51931
                               Reign Over Me (2007)
                                                                Drama
    65642 Timecrimes (Cronocrímenes, Los) (2007) Sci-Fi|Thriller
  predicted rating
0
           4.641525
1
           4.594163
2
           4.547809
3
           4.546082
           4.544277
Tops 5 Recommendations for User 375:
  movieId
                                                          title \
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
0
1
      8477
                                              Jetée, La (1962)
2
      2202
                                               Lifeboat (1944)
3
     56782
                                    There Will Be Blood (2007)
4
       930
                                              Notorious (1946)
                        genres predicted rating
0
  Comedy|Crime|Drama|Thriller
                                         5.000000
1
                Romance|Sci-Fi
                                         4.985212
2
                                         4.976319
                     Drama|War
3
                 Drama|Western
                                         4.942362
    Film-Noir|Romance|Thriller
                                         4.941330
Tops 5 Recommendations for User 376:
  movieId
      3451
                         Guess Who's Coming to Dinner (1967)
0
1
      3200
                                      Last Detail, The (1973)
2
   177593 Three Billboards Outside Ebbing, Missouri (2017)
3
    106642
                                Day of the Doctor, The (2013)
4
     1248
                                         Touch of Evil (1958)
                     genres predicted_rating
0
                      Drama
                                      4.737439
                                      4.696978
1
               Comedy|Drama
2
                Crime|Drama
                                      4.675959
3
     Adventure | Drama | Sci-Fi
                                      4.632885
  Crime|Film-Noir|Thriller
                                      4.594510
Tops 5 Recommendations for User 377:
  movieId
                                                          title \
0
     2202
                                               Lifeboat (1944)
1
     8477
                                              Jetée, La (1962)
2
      4642
                              Hedwig and the Angry Inch (2000)
     27156 Neon Genesis Evangelion: The End of Evangelion...
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Paths of Glory (1957)
      1178
                                   genres predicted rating
0
                                Drama|War
                                                    4.901858
1
                           Romance|Sci-Fi
                                                    4.831890
2
                    Comedy|Drama|Musical
                                                   4.811115
3
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.801184
4
                                Drama|War
                                                    4.785429
Tops 5 Recommendations for User 378:
   movieId
                                                          title \
0
      1178
                                         Paths of Glory (1957)
1
      2202
                                               Lifeboat (1944)
2
      7008
           Last Tango in Paris (Ultimo tango a Parigi) (1...
     27156 Neon Genesis Evangelion: The End of Evangelion...
      3451
                           Guess Who's Coming to Dinner (1967)
                                   genres predicted rating
0
                                                    4.473773
                                Drama|War
1
                                Drama|War
                                                    4.472946
2
                            Drama|Romance
                                                    4.465923
3
   Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.434649
                                                    4.434326
                                    Drama
Tops 5 Recommendations for User 379:
   movieId
                                                          title \
      1217
                                                     Ran (1985)
0
1
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
2
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
3
   177593 Three Billboards Outside Ebbing, Missouri (2017)
    106642
                                 Day of the Doctor, The (2013)
                   genres predicted rating
0
                DramalWar
                                    4.244462
1
            Drama|Romance
                                    4.202155
2
                                    4.200516
                Drama|War
3
                                    4.195937
              Crime|Drama
                                    4.193836
  Adventure | Drama | Sci-Fi
Tops 5 Recommendations for User 380:
   movieId
                                                          title
0
      2202
                                               Lifeboat (1944)
1
      1217
                                                     Ran (1985)
2
    177593
            Three Billboards Outside Ebbing, Missouri (2017)
3
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
4
       930
                                              Notorious (1946)
                        genres predicted rating
0
                     Drama|War
                                         4.697773
1
                     Drama|War
                                         4.676797
2
                   Crime|Drama
                                         4.657248
  Comedy|Crime|Drama|Thriller
                                         4.641181
    Film-Noir|Romance|Thriller
Tops 5 Recommendations for User 381:
   movieId
                                                         title
                                                                         genres
0
     3200
                                      Last Detail, The (1973)
                                                                  Comedy|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
                                 It Happened One Night (1934)
                                                                Comedy | Romance
3
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                   Crime|Drama
      2360
                             Celebration, The (Festen) (1998)
                                                                          Drama
   predicted rating
0
           4.407834
           4.394812
1
2
           4.392547
3
           4.369162
           4.360026
Tops 5 Recommendations for User 382:
  movieId
                                              title
                                                                        genres
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Ran (1985)

Drama|War

1217

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1
      1178
                              Paths of Glory (1957)
                                                                     Drama|War
2
      2202
                                   Lifeboat (1944)
                                                                     Drama|War
      1136 Monty Python and the Holy Grail (1975) Adventure | Comedy | Fantasy
3
      4642
                  Hedwig and the Angry Inch (2000)
                                                      Comedy|Drama|Musical
   predicted_rating
0
           4.693153
1
           4.666586
2
           4.610332
3
           4.607833
           4.588441
Tops 5 Recommendations for User 383:
   177593 Three Billboards Outside Ebbing, Missouri (2017)
1
   159817
                                          Planet Earth (2006)
2
    106642
                                Day of the Doctor, The (2013)
3
     8477
                                             Jetée, La (1962)
      1104
                             Streetcar Named Desire, A (1951)
4
                   genres predicted rating
0
              Crime|Drama
                                   4.810008
1
                                    4.794991
              Documentary
2
  Adventure|Drama|Sci-Fi
                                   4.790810
3
           Romance|Sci-Fi
                                    4.757108
4
                                    4.751134
                    Drama
Tops 5 Recommendations for User 384:
  movieId
                                                          title \
0
    27156 Neon Genesis Evangelion: The End of Evangelion...
1
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                              Shawshank Redemption, The (1994)
3
    116897
                                             Wild Tales (2014)
4
     6791
                   Babette's Feast (Babettes gæstebud) (1987)
                                   genres predicted rating
  Action|Animation|Drama|Fantasy|Sci-Fi
0
                                                  4.289728
                                                   4.279767
1
                              Crime | Drama
2
                              Crime | Drama
                                                   4.257967
3
                   Comedy|Drama|Thriller
                                                   4.256982
4
                                    Drama
                                                   4.243331
Tops 5 Recommendations for User 385:
  movieId
                                                          title \
                                         Paths of Glory (1957)
0
     1178
1
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
2
     1217
                                                    Ran (1985)
3
     27156 Neon Genesis Evangelion: The End of Evangelion...
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
                                   genres predicted rating
0
                                Drama|War
                                                   4.251236
1
                              Crime|Drama
                                                   4.214047
2
                                Drama|War
                                                   4.211350
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.204555
                           Drama|Romance
                                                   4.173896
Tops 5 Recommendations for User 386:
   movieId
                                                          title
0
      1104
                              Streetcar Named Desire, A (1951)
      1178
1
                                         Paths of Glory (1957)
2
     1217
                                                    Ran (1985)
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
4
     1248
                                          Touch of Evil (1958)
                                   genres predicted rating
0
                                   Drama
                                                   3.845438
1
                                Drama|War
                                                   3.798040
2
                                Drama|War
                                                   3.730041
  Action | Animation | Drama | Fantasy | Sci-Fi
                                                   3.700181
                Crime|Film-Noir|Thriller
                                                   3.698238
```

```
movieId
                                                        title
                                                                    genres
                                                                Drama|War
0
     1178
                                        Paths of Glory (1957)
1
    177593
           Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                              Drama|War
2
                                              Lifeboat (1944)
      2202
                                                               Drama|War
3
      1217
                                                   Ran (1985)
4
      6460
                              Trial, The (Procès, Le) (1962)
                                                                    Drama
   predicted_rating
0
           4.303561
1
           4.184296
2
           4.160950
3
           4.149476
           4.142315
Tops 5 Recommendations for User 388:
   movieId
                                     Last Detail, The (1973)
0
      3200
     1237 Seventh Seal, The (Sjunde inseglet, Det) (1957)
1
2
     8477
                                            Jetée, La (1962)
     65642
3
                     Timecrimes (Cronocrimenes, Los) (2007)
4
      930
                                            Notorious (1946)
                       genres predicted_rating
                                       4.790706
0
                 Comedy|Drama
1
                        Drama
                                       4.745479
2
               Romance|Sci-Fi
                                       4.664050
3
              Sci-Fi|Thriller
                                       4.623839
  Film-Noir|Romance|Thriller
                                       4.619661
Tops 5 Recommendations for User 389:
   movieId
                                                        title \
     1041
                                        Secrets & Lies (1996)
     1104
1
                            Streetcar Named Desire, A (1951)
2
     2202
                                             Lifeboat (1944)
3
   177593 Three Billboards Outside Ebbing, Missouri (2017)
   106642
                               Day of the Doctor, The (2013)
4
                   genres predicted rating
0
                    Drama
                                   5.000000
1
                    Drama
                                    5.000000
2
                Drama|War
                                    5.000000
3
              Crime|Drama
                                    5.000000
  Adventure|Drama|Sci-Fi
                                    4.975953
Tops 5 Recommendations for User 390:
  movieId
                                                         title \
0
    8477
                                              Jetée, La (1962)
1
      6460
                                Trial, The (Procès, Le) (1962)
2
      3200
                                       Last Detail, The (1973)
3
      246
                                            Hoop Dreams (1994)
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
                        genres predicted rating
0
                Romance | Sci-Fi
                                        4.561921
1
                         Drama
                                        4.475456
2
                  Comedy|Drama
                                        4.467332
3
                   Documentary
                                        4.450628
  Comedy | Crime | Drama | Thriller
                                         4.430935
Tops 5 Recommendations for User 391:
   movieId
                                                         title \
0
    27156 Neon Genesis Evangelion: The End of Evangelion...
1
     1248
                                          Touch of Evil (1958)
2
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
3
     1237
            Seventh Seal, The (Sjunde inseglet, Det) (1957)
4
      1262
                                      Great Escape, The (1963)
                                  genres predicted rating
  Action | Animation | Drama | Fantasy | Sci-Fi
                                                  4.641317
1
                Crime|Film-Noir|Thriller
                                                   4.504718
```

Crime|Drama

4.501911

Tops 5 Recommendations for User 387:

2

```
4
              Action|Adventure|Drama|War
                                                   4.440782
Tops 5 Recommendations for User 392:
  movieId
                                                       title
      3200
                                    Last Detail, The (1973)
1
      1223 Grand Day Out with Wallace and Gromit, A (1989)
                                    To Catch a Thief (1955)
2
      933
      3435
3
                                    Double Indemnity (1944)
      904
                                         Rear Window (1954)
4
                                       genres predicted rating
0
                                 Comedy|Drama
                                                      4.277349
  Adventure | Animation | Children | Comedy | Sci-Fi
2
               Crime | Mystery | Romance | Thriller
                                                      4.274414
3
                        Crime|Drama|Film-Noir
                                                      4.271558
4
                             Mystery|Thriller
                                                       4.260384
Tops 5 Recommendations for User 393:
  movieId
                               Trial, The (Procès, Le) (1962)
0
     6460
1
     4642
                             Hedwig and the Angry Inch (2000)
2
     54190
                                   Across the Universe (2007)
3
     3266 Man Bites Dog (C'est arrivé près de chez vous)...
      4144
                In the Mood For Love (Fa yeung nin wa) (2000)
                          genres predicted rating
0
                           Drama 4.730075
1
            Comedy|Drama|Musical
                                          4.713009
2
  Drama|Fantasy|Musical|Romance
                                          4.709295
3
   Comedy|Crime|Drama|Thriller
                                          4.683473
4
                   Drama|Romance
                                          4.675737
Tops 5 Recommendations for User 394:
  movieId
                                                         title \
                                              Lifeboat (1944)
     2202
0
    40491 Match Factory Girl, The (Tulitikkutehtaan tytt...
1
2
                             Celebration, The (Festen) (1998)
      2360
                                         Reign Over Me (2007)
3
     51931
     1136
4
                       Monty Python and the Holy Grail (1975)
                     genres predicted_rating
0
                  Drama|War
                            4.043054
1
               Comedy|Drama
                                     3.973854
2
                      Drama
                                     3.949011
3
                      Drama
                                     3.931875
  Adventure | Comedy | Fantasy
                                     3.916955
Tops 5 Recommendations for User 395:
   177593 Three Billboards Outside Ebbing, Missouri (2017)
1
                                                 Dune (2000)
2
     89759
           Separation, A (Jodaeiye Nader az Simin) (2011)
3
      176
                                   Living in Oblivion (1995)
                                       Never Cry Wolf (1983)
      3347
4
                 genres predicted rating
0
            Crime|Drama
                                 4.223591
  Drama|Fantasy|Sci-Fi
                                 4.163969
2
                  Drama
                                 4.116923
3
                 Comedy
                                 4.116628
       Adventure | Drama
                                 4.113911
Tops 5 Recommendations for User 396:
  movieId
                                                         title \
0
    27156 Neon Genesis Evangelion: The End of Evangelion...
1
     1178
                                        Paths of Glory (1957)
2
     1237
             Seventh Seal, The (Sjunde inseglet, Det) (1957)
3
     2924
                             Drunken Master (Jui kuen) (1978)
      6791
                   Babette's Feast (Babettes gæstebud) (1987)
```

Drama

4.464467

3

genres predicted rating

```
Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.096772
1
                                Drama|War
                                                   4.096124
2
                                    Drama
                                                   4.059658
3
                           Action | Comedy
                                                   4.059510
4
                                    Drama
                                                   4.054343
Tops 5 Recommendations for User 397:
  movieId
                                                         title \
0
     2202
                                               Lifeboat (1944)
      933
1
                                       To Catch a Thief (1955)
2
     1178
                                         Paths of Glory (1957)
3
   177593
            Three Billboards Outside Ebbing, Missouri (2017)
      2239 Swept Away (Travolti da un insolito destino ne...
                           genres predicted rating
0
                        Drama|War
                                            4.762562
1
  Crime|Mystery|Romance|Thriller
                                            4.665108
2
                        Drama|War
                                            4.656289
3
                      Crime|Drama
                                            4.648690
4
                     Comedy|Drama
                                            4.602826
Tops 5 Recommendations for User 398:
  movieId
                                                        title \
   106642
                                Day of the Doctor, The (2013)
                            Streetcar Named Desire, A (1951)
1
     1104
2
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                              Lifeboat (1944)
3
     2202
4
     1178
                                        Paths of Glory (1957)
                   genres predicted rating
  Adventure|Drama|Sci-Fi
                                    4.895581
1
                    Drama
                                    4.878670
2
                                   4.854868
              Crime|Drama
3
                DramalWar
                                    4.809739
                Drama|War
                                    4.793927
Tops 5 Recommendations for User 399:
  movieId
                                                          title \
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
0
     40491 Match Factory Girl, The (Tulitikkutehtaan tytt...
1
2
      1217
                                                    Ran (1985)
                          Guess Who's Coming to Dinner (1967)
3
      3451
      1104
                             Streetcar Named Desire, A (1951)
                        genres predicted rating
0
  Comedy|Crime|Drama|Thriller
                                        4.605153
1
                  Comedy|Drama
                                         4.503678
2
                     Drama|War
                                         4.489711
3
                         Drama
                                         4.461755
                         Drama
                                         4.454518
Tops 5 Recommendations for User 400:
  movieId
                                                         title \
                                               Lifeboat (1944)
      2202
0
     1104
1
                             Streetcar Named Desire, A (1951)
2
                               Trial, The (Procès, Le) (1962)
     6460
3
     27156 Neon Genesis Evangelion: The End of Evangelion...
     1178
                                         Paths of Glory (1957)
                                   genres predicted_rating
0
                                Drama|War
                                                   4.904192
1
                                                   4.886267
                                    Drama
2
                                    Drama
                                                   4.879829
3
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.870620
                                Drama|War
                                                   4.867785
Tops 5 Recommendations for User 401:
  movieId
                                        title
                                                         genres
     1104 Streetcar Named Desire, A (1951)
1
      1178
                       Paths of Glory (1957)
                                                      Drama|War
2
      2202
                             Lifeboat (1944)
                                                      DramalWar
3
      904
                          Rear Window (1954) Mystery|Thriller
```

```
predicted rating
0
           4.291161
           4.252561
1
2
           4.244142
3
           4.236493
4
           4.234041
Tops 5 Recommendations for User 402:
  movieId
                                                                      genres \
                                                       title
0
     3200
                                     Last Detail, The (1973)
                                                               Comedy|Drama
1
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
     8477
                                            Jetée, La (1962) Romance | Sci-Fi
      1041
                                        Secrets & Lies (1996)
     1104
                            Streetcar Named Desire, A (1951)
  predicted rating
0
           4.768856
1
           4.683169
2
           4.652828
3
           4.635713
           4.630240
Tops 5 Recommendations for User 403:
                                                         title \
  movieId
    27156 Neon Genesis Evangelion: The End of Evangelion...
1
      1178
                                        Paths of Glory (1957)
2
                             Shawshank Redemption, The (1994)
      318
3
      2202
                                              Lifeboat (1944)
      3451
                          Guess Who's Coming to Dinner (1967)
                                  genres predicted rating
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.557414
1
                               Drama|War
                                                  4.525416
2
                             Crime|Drama
                                                  4.481111
3
                                                   4.464468
                               Drama|War
4
                                                   4.429004
                                   Drama
Tops 5 Recommendations for User 404:
  movieId
                                                       title
                                                                   genres
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      3451
                        Guess Who's Coming to Dinner (1967)
                                                                    Drama
2
      1104
                            Streetcar Named Desire, A (1951)
                                                                     Drama
3
      1178
                                       Paths of Glory (1957)
                                                              Drama|War
      2202
                                             Lifeboat (1944)
                                                                 Drama|War
  predicted rating
0
          4.360047
1
           4.256289
2
           4.245939
3
           4.237954
           4.220105
Tops 5 Recommendations for User 405:
  movieId
                                                       title
                                                                    genres \
0
    1217
                                                  Ran (1985)
                                                                 Drama|War
                                                               Drama|War
1
      2202
                                             Lifeboat (1944)
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
3
    51931
                                        Reign Over Me (2007)
                                                                    Drama
     1104
                            Streetcar Named Desire, A (1951)
                                                                     Drama
  predicted rating
0
           4.620447
1
           4.610044
2
           4.606144
3
           4.600358
           4.586626
Tops 5 Recommendations for User 406:
  movieId
                                                         title \
     1217
                                                   Ran (1985)
```

4

318 Shawshank Redemption, The (1994)

Crime|Drama

```
1
     89904
                                            The Artist (2011)
2
           Sophie Scholl: The Final Days (Sophie Scholl -...
     43376
3
     2239 Swept Away (Travolti da un insolito destino ne...
4
     26810
                                        Bad Boy Bubby (1993)
                 genres predicted rating
0
              Drama|War
                                4.655623
  Comedy|Drama|Romance
1
                                 4.593245
2
             Drama|War
                                 4.506311
3
           Comedy|Drama
                                 4.499732
4
                 Drama
                                 4.495118
Tops 5 Recommendations for User 407:
                                                       title
                                                                   genres \
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1178
                                       Paths of Glory (1957)
                                                             Drama|War
                                     Five Easy Pieces (1970)
2
      3201
                                             Lifeboat (1944)
3
     2202
                                                               Drama|War
     3200
                                     Last Detail, The (1973) Comedy|Drama
   predicted rating
0
           4.669593
1
           4.663232
2
           4.568508
3
           4.552301
           4.521046
Tops 5 Recommendations for User 408:
   movieId
                                                        title
                                                                    genres \
    43376 Sophie Scholl: The Final Days (Sophie Scholl -...
0
                                                                Drama|War
1
     1217
                                                  Ran (1985)
                                                                Drama|War
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
3
     6460
                               Trial, The (Procès, Le) (1962)
     1178
                                        Paths of Glory (1957) Drama|War
   predicted rating
0
           4.948561
           4.930818
1
2
           4.900659
3
           4.889592
           4.871349
Tops 5 Recommendations for User 409:
  movieId
                                                        title \
     1104
                            Streetcar Named Desire, A (1951)
0
   177593
1
           Three Billboards Outside Ebbing, Missouri (2017)
2
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
3
                                             Lifeboat (1944)
      2202
      1201 Good, the Bad and the Ugly, The (Buono, il bru...
                        genres predicted rating
0
                        Drama
                                        4.845448
1
                   Crime|Drama
                                        4.801420
2
  Comedy|Crime|Drama|Thriller
                                        4.680840
3
                                        4.678508
                     Drama|War
     Action|Adventure|Western
                                        4.650927
Tops 5 Recommendations for User 410:
   movieId
                                                        title
                                                                      genres \
0
      3200
                                      Last Detail, The (1973)
                                                               Comedy|Drama
1
      1217
                                                   Ran (1985)
                                                                   Drama|War
2
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
     43376 Sophie Scholl: The Final Days (Sophie Scholl -... Drama|War
3
     2202
                                              Lifeboat (1944)
                                                                   Drama|War
   predicted rating
0
          4.659149
1
           4.652670
2
           4.643402
3
           4.637476
           4.623660
```

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movieId
                                                        title
                                                                        genres
                                             Jetée, La (1962) Romance|Sci-Fi
0
     8477
1
      2202
                                              Lifeboat (1944) Drama|War
2
                                        Paths of Glory (1957)
      1178
                                                                    Drama|War
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama 1041 Secrets & Lies (1996) Drama
3
   predicted_rating
0
           4.273309
1
           4.269494
2
           4.268721
3
           4.233665
           4.224562
Tops 5 Recommendations for User 412:
   movieId
                                                         title
                                                                       genres \
0
     1178
                                         Paths of Glory (1957)
                                                                     Drama|War
1
      3451
                          Guess Who's Coming to Dinner (1967)
                                                                        Drama
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
2
                             Streetcar Named Desire, A (1951)
3
              Separation, A (Jodaeiye Nader az Simin) (2011)
     89759
   predicted_rating
0
           4.675052
1
           4.585903
2
           4.575114
3
           4.560335
           4.536733
Tops 5 Recommendations for User 413:
  movieId
                                                        title \
     1217
                                                   Ran (1985)
                             Celebration, The (Festen) (1998)
1
      2360
2
     8477
                                             Jetée, La (1962)
3
                                   Across the Universe (2007)
    54190
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                          genres predicted rating
0
                       Drama|War
                                                  5
1
                           Drama
2
                  Romance | Sci-Fi
                                                  5
3
  Drama|Fantasy|Musical|Romance
                                                  5
                     Crime|Drama
Tops 5 Recommendations for User 414:
  movieId
    27156 Neon Genesis Evangelion: The End of Evangelion...
0
1
     2360
                             Celebration, The (Festen) (1998)
2
      246
                                            Hoop Dreams (1994)
3
      3451
                          Guess Who's Coming to Dinner (1967)
      6460
                                Trial, The (Procès, Le) (1962)
                                   genres predicted rating
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.473967
1
                                    Drama
                                                   4.339898
2
                              Documentary
                                                   4.299464
3
                                    Drama
                                                   4.287420
4
                                    Drama
                                                   4.282876
Tops 5 Recommendations for User 415:
  movieId
                                                         title \
                                         Paths of Glory (1957)
0
     1178
      1104
1
                              Streetcar Named Desire, A (1951)
2
     2202
                                               Lifeboat (1944)
3
     27156 Neon Genesis Evangelion: The End of Evangelion...
4
     6460
                                Trial, The (Procès, Le) (1962)
                                   genres predicted rating
0
                                Drama|War
                                                   4.718772
1
                                    Drama
                                                   4.711870
2
                                Drama|War
                                                   4.710068
```

Tops 5 Recommendations for User 411:

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Action|Animation|Drama|Fantasy|Sci-Fi
                                   Drama
                                                   4.662926
Tops 5 Recommendations for User 416:
  movieId
                                                         title
      2202
                                               Lifeboat (1944)
1
      1411
                                                 Hamlet (1996)
2
    27156 Neon Genesis Evangelion: The End of Evangelion...
3
     1208
                                        Apocalypse Now (1979)
      1217
4
                                                    Ran (1985)
                                  genres predicted rating
0
                               Drama|War
1
                     Crime|Drama|Romance
  Action | Animation | Drama | Fantasy | Sci-Fi
                                                  4.016869
3
                        Action|Drama|War
                                                   3.923754
4
                               Drama|War
                                                   3.900670
Tops 5 Recommendations for User 417:
  movieId
    177593
            Three Billboards Outside Ebbing, Missouri (2017)
1
      2202
                                               Lifeboat (1944)
2
      1178
                                         Paths of Glory (1957)
3
     27156 Neon Genesis Evangelion: The End of Evangelion...
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
                                  genres predicted rating
0
                             Crime|Drama
                                            4.973499
1
                               Drama|War
                                                   4.956465
2
                               Drama|War
                                                  4.937811
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.905442
             Comedy|Crime|Drama|Thriller
Tops 5 Recommendations for User 418:
  movieId
    27156 Neon Genesis Evangelion: The End of Evangelion...
0
      1272
                                                 Patton (1970)
1
                               Godfather: Part II, The (1974)
2
      1221
3
      750 Dr. Strangelove or: How I Learned to Stop Worr...
     69524
              Raiders of the Lost Ark: The Adaptation (1989)
                                  genres predicted rating
0
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.506311
1
                                                   4.475289
                               Drama|War
2
                             Crime|Drama
                                                  4.407494
3
                              Comedy|War
                                                   4.397243
4
               Action|Adventure|Thriller
                                                   4.390488
Tops 5 Recommendations for User 419:
                                                         title
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
                                           Hoop Dreams (1994)
1
      246
                                                                Documentary
2
      8132
                                              Gladiator (1992)
                                                                Action|Drama
3
      1272
                                                 Patton (1970)
                                                                    Drama|War
     1283
                                              High Noon (1952) Drama|Western
4
   predicted rating
0
           4.806470
1
           4.696119
2
           4.636853
3
           4.594071
           4.586012
Tops 5 Recommendations for User 420:
  movieId
                                                         title \
0
      2202
                                               Lifeboat (1944)
1
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
2
     1104
                             Streetcar Named Desire, A (1951)
3
     1178
                                         Paths of Glory (1957)
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                  genres predicted rating
```

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0
                               Drama|War
                                                  4.479107
1
                             Crime | Drama
                                                  4.478182
2
                                  Drama
                                                  4.470770
3
                               Drama|War
                                                  4.465495
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.438989
Tops 5 Recommendations for User 421:
                             title
  movieId
                                                       genres
0
    3435 Double Indemnity (1944)
                                       Crime|Drama|Film-Noir
     1041 Secrets & Lies (1996)
1
                                                        Drama
2
      2202
                   Lifeboat (1944)
                                                    Drama|War
3
      1248 Touch of Evil (1958) Crime|Film-Noir|Thriller
     3200 Last Detail, The (1973)
                                                 Comedy|Drama
   predicted rating
0
           4.693237
1
           4.665943
2
           4.647130
3
           4.633008
           4.629545
Tops 5 Recommendations for User 422:
                                                        title \
   movieId
    27156 Neon Genesis Evangelion: The End of Evangelion...
1
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
2
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
3
      1217
                                                   Ran (1985)
4
     2202
                                              Lifeboat (1944)
                                  genres predicted rating
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                 4.415986
1
                             Crime|Drama
                                                  4.336502
2
                           Drama|Romance
                                                 4.334218
3
                               Drama|War
                                                  4.288805
                               Drama|War
                                                  4.260536
Tops 5 Recommendations for User 423:
   movieId
                                                        title
                                                                      genres
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
0
                                       Paths of Glory (1957)
1
      1178
2
      912
                                            Casablanca (1942) Drama|Romance
3
      1104
                             Streetcar Named Desire, A (1951)
      1237
             Seventh Seal, The (Sjunde inseglet, Det) (1957)
                                                                       Drama
   predicted rating
0
          4.530515
1
           4.512610
2
           4.486568
3
           4.481769
           4.477935
Tops 5 Recommendations for User 424:
  movieId
                                                   genres predicted rating
                                       title
                       Bad Boy Bubby (1993)
                                                                   4.506674
0
     26810
                                                    Drama
                     Last Detail, The (1973) Comedy|Drama
1
      3200
                                                                    4.501580
2
      1217
                                  Ran (1985)
                                              Drama|War
                                                                   4.472893
3
            Trial, The (Procès, Le) (1962)
                                                 Drama
      6460
                                                                    4.454622
      1104 Streetcar Named Desire, A (1951)
                                                     Drama
                                                                    4.443289
Tops 5 Recommendations for User 425:
  movieId
                                                        title
                                                                   genres \
0
    177593
            Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951) Drama
1
      1104
2
      3451
                          Guess Who's Coming to Dinner (1967)
                                                                    Drama
3
     6460
                              Trial, The (Procès, Le) (1962)
                                                                    Drama
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                                               Drama|War
   predicted rating
           4.332391
1
           4.330556
2
           4.302381
3
           4.291415
```

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Tops 5 Recommendations for User 426:
   movieId
                                                        title
      3451
                         Guess Who's Coming to Dinner (1967)
0
      1262
                                    Great Escape, The (1963)
1
2
      1283
                                            High Noon (1952)
3
                            Streetcar Named Desire, A (1951)
     1104
4
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                       genres predicted rating
0
                        Drama
                                      4.460111
1
  Action|Adventure|Drama|War
                                      4.442857
2
                                      4.392563
                Drama|Western
3
                        Drama
                                      4.358093
                  Crime|Drama
                                       4.345763
Tops 5 Recommendations for User 427:
   movieId
0
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
1
     1178
                                        Paths of Glory (1957)
2
      1104
                             Streetcar Named Desire, A (1951)
3
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                               Lifeboat (1944)
                                  genres predicted_rating
                               Drama|War
0
                                                   4.247049
1
                               Drama|War
                                                   4.232808
2
                                   Drama
                                                  4.192613
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.189783
                               Drama|War
                                                  4.154038
Tops 5 Recommendations for User 428:
  movieId
                                                         title \
    89904
                                            The Artist (2011)
      4021
1
                                    Before Night Falls (2000)
2
       750
           Dr. Strangelove or: How I Learned to Stop Worr...
                                        Godfather, The (1972)
3
       858
4
    177593
            Three Billboards Outside Ebbing, Missouri (2017)
                 genres predicted_rating
0
  Comedy|Drama|Romance
                                 3.909461
1
                  Drama
                                 3.866928
2
                                 3.859969
             Comedy|War
3
            Crime|Drama
                                 3.850749
4
            Crime|Drama
                                 3.850120
Tops 5 Recommendations for User 429:
  movieId
     6460
                               Trial, The (Procès, Le) (1962)
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
      2202
                                              Lifeboat (1944)
3
     3451
                          Guess Who's Coming to Dinner (1967)
     1104
4
                             Streetcar Named Desire, A (1951)
                                  genres predicted rating
0
                                   Drama
                                                  4.997710
   Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.966825
2
                               Drama|War
                                                   4.951795
3
                                    Drama
                                                   4.918610
                                    Drama
                                                   4.902721
Tops 5 Recommendations for User 430:
  movieId
                                                   title \
0
     2202
                                        Lifeboat (1944)
      3200
                                Last Detail, The (1973)
1
2
     1104
                       Streetcar Named Desire, A (1951)
3
      2019 Seven Samurai (Shichinin no samurai) (1954)
      1041
                                  Secrets & Lies (1996)
                   genres predicted rating
0
                Drama|War
                                   4.726509
```

4

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2
                    Drama
                                    4.667007
3
  Action|Adventure|Drama
                                    4.658473
                                    4.648414
                    Drama
Tops 5 Recommendations for User 431:
   movieId
                                                         title \
    177593 Three Billboards Outside Ebbing, Missouri (2017)
0
1
      6460
                               Trial, The (Procès, Le) (1962)
2
      1223
            Grand Day Out with Wallace and Gromit, A (1989)
3
      1217
                                                   Ran (1985)
      527
                                      Schindler's List (1993)
                                        genres predicted rating
0
                                   Crime|Drama
                                                         3.978330
1
                                         Drama
                                                         3.951903
2
  Adventure | Animation | Children | Comedy | Sci-Fi
                                                         3.936575
3
                                     Drama|War
                                                         3.925802
4
                                     Drama|War
                                                         3.923574
Tops 5 Recommendations for User 432:
   movieId
                                                         title
                                                                       genres
      1104
                             Streetcar Named Desire, A (1951)
                                                                        Drama
1
      3200
                                      Last Detail, The (1973)
                                                                Comedy|Drama
2
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                         Guess Who's Coming to Dinner (1967)
3
      3451
                                                                        Drama
4
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
   predicted rating
0
           4.525676
1
           4.499550
2
           4.486984
3
           4.465529
           4.448529
Tops 5 Recommendations for User 433:
   movieId
                                                          title
      5690
0
               Grave of the Fireflies (Hotaru no haka) (1988)
1
      3451
                           Guess Who's Coming to Dinner (1967)
                                       To Catch a Thief (1955)
2
       933
3
       720
           Wallace & Gromit: The Best of Aardman Animatio...
      2360
                              Celebration, The (Festen) (1998)
                            genres predicted_rating
0
              Animation|Drama|War
                                            4.551907
                                            4.503568
1
                             Drama
2
  Crime|Mystery|Romance|Thriller
                                            4.452924
3
      Adventure | Animation | Comedy
                                            4.450382
4
                             Drama
Tops 5 Recommendations for User 434:
   movieId
0
     27156 Neon Genesis Evangelion: The End of Evangelion...
1
      1178
                                         Paths of Glory (1957)
2
      1221
                                Godfather: Part II, The (1974)
3
      2202
                                                Lifeboat (1944)
    177593
             Three Billboards Outside Ebbing, Missouri (2017)
                                   genres predicted rating
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.683222
                                Drama|War
1
                                                    4.649710
2
                                                    4.617303
                              Crime | Drama
3
                                Drama|War
                                                    4.577996
                              Crime | Drama
                                                    4.565430
Tops 5 Recommendations for User 435:
   movieId
                                                          title \
0
            Three Billboards Outside Ebbing, Missouri (2017)
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
      1041
                                         Secrets & Lies (1996)
3
     1178
                                         Paths of Glory (1957)
   116897
                                              Wild Tales (2014)
```

4.714010

1

Comedy|Drama

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genres predicted_rating
0
                             Crime|Drama
                                                  4.955919
1
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.941964
2
                                   Drama
                                                   4.941501
3
                               Drama|War
                                                   4.924808
4
                   Comedy|Drama|Thriller
                                                   4.916269
Tops 5 Recommendations for User 436:
  movieId
                                                        title
                                                                    genres
    2202
0
                                             Lifeboat (1944)
                                                                Drama|War
1
     1104
                            Streetcar Named Desire, A (1951)
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                              Crime|Drama
3
     1178
                                       Paths of Glory (1957)
      3451
                         Guess Who's Coming to Dinner (1967)
  predicted rating
0
           4.305348
           4.278630
1
2
           4.213527
3
           4.204857
           4.197032
Tops 5 Recommendations for User 437:
  movieId
                                                         title \
0
      858
                                        Godfather, The (1972)
      1217
1
                                                    Ran (1985)
2
     1136
                       Monty Python and the Holy Grail (1975)
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
     4642
                             Hedwig and the Angry Inch (2000)
                                  genres predicted rating
0
                             Crime|Drama
                                                  4.649356
1
                               Drama|War
                                                  4.612244
2
                Adventure | Comedy | Fantasy
                                                  4.603825
3
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.567383
                    Comedy|Drama|Musical
                                                   4.561640
Tops 5 Recommendations for User 438:
  movieId
0
      3451
                          Guess Who's Coming to Dinner (1967)
1
      1217
                                                    Ran (1985)
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
2
3
      3200
                                      Last Detail, The (1973)
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
4
                        genres predicted rating
0
                         Drama
                                        4.450626
1
                     Drama|War
                                        4.411379
2
                     Drama|War
                                        4.390723
3
                  Comedy|Drama
                                        4.370483
  Comedy|Crime|Drama|Thriller
                                        4.367220
Tops 5 Recommendations for User 439:
  movieId
                                                        title
                                                                       genres \
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                                                              Crime|Drama
                                             Jetée, La (1962) Romance|Sci-Fi
1
      8477
2
                                              Lifeboat (1944)
      2202
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                    Drama|War
      3200
                                     Last Detail, The (1973)
                                                                Comedy|Drama
  predicted_rating
           4.669585
0
           4.654597
1
           4.653131
2
3
           4.646336
           4.627793
Tops 5 Recommendations for User 440:
  movieId
     1104
                             Streetcar Named Desire, A (1951)
     27156 Neon Genesis Evangelion: The End of Evangelion...
```

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3
      1041
                                         Secrets & Lies (1996)
4
    177593
             Three Billboards Outside Ebbing, Missouri (2017)
                                   genres predicted rating
0
                                    Drama
                                                   4.682095
1
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.663383
2
                                Drama|War
                                                   4.662520
3
                                   Drama
                                                   4.644089
4
                                                   4.630242
                              Crime|Drama
Tops 5 Recommendations for User 441:
  movieId
                                        title
                                                                        genres
       246
                          Hoop Dreams (1994)
                                                                   Documentary
      933
                     To Catch a Thief (1955)
1
                                              Crime | Mystery | Romance | Thriller
2
      1041
                       Secrets & Lies (1996)
3
      1104 Streetcar Named Desire, A (1951)
                                                                         Drama
4
     1178
                       Paths of Glory (1957)
                                                                     Drama|War
  predicted rating
0
                  5
1
2
                  5
3
                  5
                  5
Tops 5 Recommendations for User 442:
  movieId
                                                       title
                                                                 genres \
      3451
                        Guess Who's Coming to Dinner (1967)
                                                                 Drama
1
      1104
                           Streetcar Named Desire, A (1951)
                                                                  Drama
2
     1237 Seventh Seal, The (Sjunde inseglet, Det) (1957)
3
    26810
                                        Bad Boy Bubby (1993)
   142488
                                            Spotlight (2015)
                                                              Thriller
  predicted rating
           2.662763
0
           2.641639
1
2
           2.633406
3
           2.593561
4
           2.592210
Tops 5 Recommendations for User 443:
  movieId
                                                         title
                                                                       genres
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                  Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                         Drama
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
2
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
3
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                     Drama|War
  predicted rating
0
           4.843617
1
           4.835262
2
           4.821555
3
           4.813008
           4.787538
Tops 5 Recommendations for User 444:
  movieId
                                                        title
                                                                     genres
0
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
                            Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
     6791
                  Babette's Feast (Babettes gæstebud) (1987)
                                                                      Drama
3
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
     6460
                              Trial, The (Procès, Le) (1962)
  predicted_rating
0
           4.734397
1
           4.599309
2
           4.579642
3
           4.579301
           4.573744
```

Lifeboat (1944)

Tops 5 Recommendations for User 445:

2

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0
      2202
                                               Lifeboat (1944)
1
      1178
                                         Paths of Glory (1957)
2
      3266
           Man Bites Dog (C'est arrivé près de chez vous)...
3
      1104
                              Streetcar Named Desire, A (1951)
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                   genres predicted rating
0
                                Drama|War
                                                  4.434228
1
                                Drama|War
                                                   4.323426
2
             Comedy|Crime|Drama|Thriller
                                                   4.294973
3
                                    Drama
                                                   4.228512
  Action|Animation|Drama|Fantasy|Sci-Fi
Tops 5 Recommendations for User 446:
  movieId
                                                          title \
0
      2202
                                               Lifeboat (1944)
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
                                Trial, The (Procès, Le) (1962)
      6460
                                         Godfather, The (1972)
3
      858
                              Shawshank Redemption, The (1994)
       318
                                   genres predicted_rating
0
                                Drama|War
                                                   4.270017
                                                   4.200931
1
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.152646
2
                                    Drama
3
                              Crime|Drama
                                                   4.141254
4
                              Crime|Drama
                                                   4.139356
Tops 5 Recommendations for User 447:
   movieId
                                                         title \
0
     2202
                                              Lifeboat (1944)
    106642
1
                                Day of the Doctor, The (2013)
2
    177593 Three Billboards Outside Ebbing, Missouri (2017)
3
     1104
                             Streetcar Named Desire, A (1951)
      6460
                               Trial, The (Procès, Le) (1962)
4
                   genres predicted rating
0
                                    4.888266
                Drama|War
1
   Adventure | Drama | Sci-Fi
                                    4.880526
2
              Crime|Drama
                                    4.842571
3
                    Drama
                                    4.790938
4
                    Drama
                                    4.775603
Tops 5 Recommendations for User 448:
  movieId
                                                          title
                                                                      genres \
0
     1178
                                         Paths of Glory (1957)
                                                                 Drama|War
      2202
                                               Lifeboat (1944)
1
                                                                   Drama|War
2
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                                                   Drama|War
3
     1104
                              Streetcar Named Desire, A (1951)
      3019
                                       Drugstore Cowboy (1989) Crime | Drama
   predicted rating
           4.012849
0
           3.966707
1
2
           3.961873
3
           3.953129
           3.950220
Tops 5 Recommendations for User 449:
  movieId
                                                       title \
0
       904
                                          Rear Window (1954)
                                        Touch of Evil (1958)
      1248
1
2
      2202
                                             Lifeboat (1944)
3
      1237
           Seventh Seal, The (Sjunde inseglet, Det) (1957)
      1041
                                       Secrets & Lies (1996)
                     genres predicted rating
           Mystery|Thriller
1
   Crime|Film-Noir|Thriller
                                      4.060297
2
                  Drama|War
                                      4.048899
3
                      Drama
                                      4.042075
```

title \

movieId

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4
                                      4.040747
                      Drama
Tops 5 Recommendations for User 450:
  movieId
                                                         title
0
      1178
                                         Paths of Glory (1957)
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
1
2
           Three Billboards Outside Ebbing, Missouri (2017)
   177593
3
    27156 Neon Genesis Evangelion: The End of Evangelion...
4
     51931
                                         Reign Over Me (2007)
                                  genres predicted rating
0
                               Drama|War
                                                  4.912951
1
                           Drama|Romance
                                                   4.882778
2
                             Crime|Drama
                                                   4.881609
  Action | Animation | Drama | Fantasy | Sci-Fi
                                                   4.851831
                                   Drama
                                                   4.787928
Tops 5 Recommendations for User 451:
  movieId
                                                         title \
0
     2202
                                               Lifeboat (1944)
     1104
1
                             Streetcar Named Desire, A (1951)
2
      1178
                                         Paths of Glory (1957)
3
     27156 Neon Genesis Evangelion: The End of Evangelion...
           Seventh Seal, The (Sjunde inseglet, Det) (1957)
                                  genres predicted_rating
0
                               Drama|War
                                                   4.851124
1
                                                   4.788706
                                   Drama
2
                               Drama|War
                                                   4.778179
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.724433
                                                   4.707694
Tops 5 Recommendations for User 452:
  movieId
                                                  title
                                                                   genres
      162
                                           Crumb (1994)
                                                              Documentary
                                    Hoop Dreams (1994)
      246
1
                                                              Documentary
2
       318
                      Shawshank Redemption, The (1994)
                                                              Crime|Drama
       741 Ghost in the Shell (Kôkaku kidôtai) (1995) Animation|Sci-Fi
3
                                    Rear Window (1954) Mystery|Thriller
4
      904
  predicted rating
0
                  5
1
                  5
2
                  5
3
                  5
                  5
4
Tops 5 Recommendations for User 453:
  movieId
                                       title
                                                genres predicted rating
     2202
                             Lifeboat (1944) Drama|War
                                                                  4.988282
1
     1178
                       Paths of Glory (1957) Drama|War
                                                                  4.928552
                                  Ran (1985)
     1217
                                              Drama|War
                                                                  4.870446
     1104 Streetcar Named Desire, A (1951)
3
                                                  Drama
                                                                  4.847330
      5500
                          Top Secret! (1984)
                                                  Comedy
                                                                   4.778240
Tops 5 Recommendations for User 454:
  movieId
                                                        title
                                                                    genres
0
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
1
     51931
                                         Reign Over Me (2007)
                                                                     Drama
2
                         Guess Who's Coming to Dinner (1967)
                                                                     Drama
3
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
     1041
                                        Secrets & Lies (1996)
  predicted rating
0
           4.389217
           4.387021
1
2
           4.383767
3
           4.374697
           4.370894
Tops 5 Recommendations for User 455:
```

movield

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0
                                        Paths of Glory (1957)
                                                                     Drama|War
           Three Billboards Outside Ebbing, Missouri (2017)
1
    177593
                                                                   Crime | Drama
2
      1041
                                        Secrets & Lies (1996)
                                                                         Drama
3
      1104
                            Streetcar Named Desire, A (1951)
                                                                         Drama
      8477
                                             Jetée, La (1962) Romance|Sci-Fi
4
   predicted_rating
           4.389601
0
1
           4.358757
2
           4.309946
3
           4.304512
           4.295855
Tops 5 Recommendations for User 456:
   movieId
                                                         title \
0
      1104
                             Streetcar Named Desire, A (1951)
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
      1041
                                         Secrets & Lies (1996)
3
      1217
                                                    Ran (1985)
      1178
                                         Paths of Glory (1957)
4
                                   genres predicted rating
0
                                    Drama
                                                   4.997746
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.939769
2
                                                   4.899626
                                    Drama
3
                                                   4.874477
                                Drama|War
4
                                Drama|War
                                                   4.848504
Tops 5 Recommendations for User 457:
   movieId
                                                         title \
0
      1178
                                         Paths of Glory (1957)
1
      2202
                                               Lifeboat (1944)
2
       750 Dr. Strangelove or: How I Learned to Stop Worr...
3
       541
                                           Blade Runner (1982)
4
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                   genres predicted rating
0
                                                   4.505856
                                Drama|War
1
                                Drama|War
                                                   4.503868
2
                               Comedy|War
                                                   4.496627
3
                  Action|Sci-Fi|Thriller
                                                   4.453503
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.445978
Tops 5 Recommendations for User 458:
  movieId
                                                         title
                                                                       genres \
0
     3451
                          Guess Who's Coming to Dinner (1967)
                                                                        Drama
1
     8132
                                              Gladiator (1992)
                                                                Action|Drama
2
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
3
      2131
                           Autumn Sonata (Höstsonaten) (1978)
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
   predicted rating
0
           4.871705
           4.832805
1
2
           4.813775
3
           4.804243
           4.792130
Tops 5 Recommendations for User 459:
   movieId
                                                         title
                                                                       genres \
0
    177593
             Three Billboards Outside Ebbing, Missouri (2017)
                                                                 Crime|Drama
1
      1104
                              Streetcar Named Desire, A (1951)
                                                                       Drama
2
      6460
                               Trial, The (Procès, Le) (1962)
                                                                        Drama
3
      2239 Swept Away (Travolti da un insolito destino ne... Comedy|Drama
4
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
   predicted rating
0
           4.849349
1
           4.836933
2
           4.784845
3
           4.784702
4
           4.780336
```

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Tops 5 Recommendations for User 460:
  movieId
                                                       title
                                                                   genres
   177593
           Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1217
                                                              Drama|War
1
                                                  Ran (1985)
2
      1041
                                       Secrets & Lies (1996)
                                                                    Drama
3
      1178
                                       Paths of Glory (1957)
                                                               Drama|War
4
      6460
                              Trial, The (Procès, Le) (1962)
                                                                   Drama
  predicted rating
0
           4.782206
1
           4.733131
2
           4.721611
3
           4.713924
           4.694803
Tops 5 Recommendations for User 461:
  movieId
                                                        title \
   142422
0
                                      The Night Before (2015)
                               Trial, The (Procès, Le) (1962)
      6460
1
      720 Wallace & Gromit: The Best of Aardman Animatio...
2
3
      1223
            Grand Day Out with Wallace and Gromit, A (1989)
                                      Midnight Express (1978)
      3498
                                       genres predicted_rating
0
                                       Comedy
                                                       3.889114
1
                                                       3.855786
                                        Drama
2
                   Adventure | Animation | Comedy
                                                       3.767872
3
  Adventure | Animation | Children | Comedy | Sci-Fi
                                                       3.767230
                                                        3.763010
Tops 5 Recommendations for User 462:
  movieId
                                                         title \
0
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
1
   106642
                                Day of the Doctor, The (2013)
2
      246
                                           Hoop Dreams (1994)
3
                               Philadelphia Story, The (1940)
      898
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
4
                   genres predicted rating
0
              Crime|Drama
                                   4.304445
1
  Adventure|Drama|Sci-Fi
                                   4.219043
2
             Documentary
                                   4.212758
3
                                   4.160459
    Comedy | Drama | Romance
4
                                   4.153600
            Drama|Romance
Tops 5 Recommendations for User 463:
                                                   genres predicted rating
  movieId
                                          title
0
     3451 Guess Who's Coming to Dinner (1967)
                                                    Drama
                                                               4.623593
      2202
                                Lifeboat (1944) Drama|War
                                                                    4.544020
1
     1178
                          Paths of Glory (1957) Drama|War
     1104
               Streetcar Named Desire, A (1951)
                                                    Drama
   142488
                               Spotlight (2015)
                                                Thriller
                                                                     4.496687
Tops 5 Recommendations for User 464:
  movieId
                                                         title
                                                                   genres \
0
    43376 Sophie Scholl: The Final Days (Sophie Scholl -... Drama|War
                                        Paths of Glory (1957) Drama|War
1
     1178
2
      2202
                                              Lifeboat (1944)
                                                               Drama|War
3
     2300
                                        Producers, The (1968)
                                                                  Comedy
   142488
                                             Spotlight (2015)
                                                                 Thriller
  predicted rating
0
           4.778135
           4.762109
1
2
           4.730124
3
           4.639695
           4.638770
Tops 5 Recommendations for User 465:
  movieId
                                                        title
                                                                    genres
     1178
                                       Paths of Glory (1957)
                                                                 Drama|War
```

```
Streetcar Named Desire, A (1951)
1
      1104
2
           Three Billboards Outside Ebbing, Missouri (2017)
    177593
                                                               Crime|Drama
                                                               Drama|War
3
      1217
                                                  Ran (1985)
4
      1041
                                        Secrets & Lies (1996)
   predicted_rating
0
           4.860626
1
           4.858178
2
           4.836425
3
           4.803945
4
           4.800584
Tops 5 Recommendations for User 466:
   movieId
     1104
                             Streetcar Named Desire, A (1951)
1
    177593 Three Billboards Outside Ebbing, Missouri (2017)
2
      3200
                                      Last Detail, The (1973)
3
     8477
                                             Jetée, La (1962)
      930
                                             Notorious (1946)
4
                       genres predicted rating
0
                        Drama
                                        4.636717
1
                  Crime|Drama
                                        4.626798
2
                 Comedy|Drama
                                        4.621251
3
               Romance | Sci-Fi
                                        4.620148
  Film-Noir|Romance|Thriller
                                        4.580905
Tops 5 Recommendations for User 467:
  movieId
                                                          title \
0
      246
                                            Hoop Dreams (1994)
1
       720 Wallace & Gromit: The Best of Aardman Animatio...
2
      1104
                             Streetcar Named Desire, A (1951)
3
     1204
                                     Lawrence of Arabia (1962)
      6460
                                Trial, The (Procès, Le) (1962)
                       genres predicted rating
0
                  Documentary
                                        4.494289
                                        4.476871
1
  Adventure | Animation | Comedy
2
                        Drama
                                        4.467042
3
          Adventure|Drama|War
                                        4.460872
4
                        Drama
                                        4.436238
Tops 5 Recommendations for User 468:
  movieId
                                              title \
     2202
                                    Lifeboat (1944)
0
1
     1104
                  Streetcar Named Desire, A (1951)
2
      3200
                           Last Detail, The (1973)
3
     65642 Timecrimes (Cronocrimenes, Los) (2007)
      930
4
                                   Notorious (1946)
                       genres predicted rating
0
                    Drama|War
                                        4.451839
1
                        Drama
                                        4.363888
2
                 Comedy|Drama
                                        4.339286
3
              Sci-Fi|Thriller
                                        4.311191
  Film-Noir|Romance|Thriller
                                        4.310008
Tops 5 Recommendations for User 469:
   movieId
                                                          title \
0
     27156 Neon Genesis Evangelion: The End of Evangelion...
1
      4642
                              Hedwig and the Angry Inch (2000)
2
     51931
                                          Reign Over Me (2007)
3
     2360
                              Celebration, The (Festen) (1998)
4
      1217
                                                    Ran (1985)
                                   genres predicted rating
  Action|Animation|Drama|Fantasy|Sci-Fi
1
                    Comedy|Drama|Musical
                                                   4.445222
2
                                    Drama
                                                   4.423616
3
                                    Drama
                                                   4.413377
4
                                Drama|War
                                                    4.394256
```

Drama

```
movieId
0
    43376 Sophie Scholl: The Final Days (Sophie Scholl -...
1
   177593
            Three Billboards Outside Ebbing, Missouri (2017)
2
      720 Wallace & Gromit: The Best of Aardman Animatio...
3
                          Guess Who's Coming to Dinner (1967)
      3451
       930
4
                                             Notorious (1946)
                       genres predicted_rating
0
                                       4.372190
                    Drama|War
1
                  Crime|Drama
                                       4.340095
2
  Adventure | Animation | Comedy
                                       4.304285
3
                        Drama
                                       4.300364
  Film-Noir|Romance|Thriller
                                       4.298572
Tops 5 Recommendations for User 471:
  movieId
                                                        title \
0
   177593 Three Billboards Outside Ebbing, Missouri (2017)
1
     1178
                                        Paths of Glory (1957)
2
                            Streetcar Named Desire, A (1951)
     1104
3
      2202
                                              Lifeboat (1944)
     1248
                                         Touch of Evil (1958)
                     genres predicted rating
0
                Crime|Drama
                                     4.391584
1
                  Drama|War
                                     4.379578
2
                      Drama
                                     4.366154
3
                  Drama|War
                                     4.340057
  Crime|Film-Noir|Thriller
                                     4.302460
Tops 5 Recommendations for User 472:
  movieId
                                                         title \
     27156 Neon Genesis Evangelion: The End of Evangelion...
                             Streetcar Named Desire, A (1951)
1
     1104
2
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
3
     3836
                                         Kelly's Heroes (1970)
      1178
                                         Paths of Glory (1957)
4
                                  genres predicted rating
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.943686
1
                                   Drama
                                                   4.853155
2
                             Crime|Drama
                                                   4.850768
3
                       Action|Comedy|War
                                                   4.846278
4
                               Drama|War
                                                   4.824256
Tops 5 Recommendations for User 473:
  movieId
                                                         title \
0
    27156 Neon Genesis Evangelion: The End of Evangelion...
1
     1178
                                         Paths of Glory (1957)
2
     1104
                             Streetcar Named Desire, A (1951)
3
     1217
                                                    Ran (1985)
      2202
                                               Lifeboat (1944)
                                  genres predicted rating
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.380335
1
                               Drama|War
                                                   4.353231
2
                                                   4.337450
                                   Drama
3
                               Drama|War
                               Drama|War
Tops 5 Recommendations for User 474:
  movieId
                                                                       genres \
                                                         title
0
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                 Crime|Drama
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
1
2
      2239 Swept Away (Travolti da un insolito destino ne... Comedy|Drama
3
      3200
                                       Last Detail, The (1973)
                                                               Comedy|Drama
      2360
                             Celebration, The (Festen) (1998)
  predicted rating
0
           4.192054
1
           4.166331
2
           4.121974
```

Tops 5 Recommendations for User 470:

```
4
           4.118188
Tops 5 Recommendations for User 475:
  movieId
                                        title
                                                                    genres
                          Hoop Dreams (1994)
       246
                                                              Documentary
1
      930
                            Notorious (1946) Film-Noir|Romance|Thriller
2
      1041
                       Secrets & Lies (1996)
                                                                     Drama
3
      1104 Streetcar Named Desire, A (1951)
                                                                     Drama
4
      1178
                       Paths of Glory (1957)
                                                                 Drama|War
  predicted rating
0
1
                  5
2
                  5
3
                  5
4
                  5
Tops 5 Recommendations for User 476:
  movieId
                                                        title
                                                                    genres
                            Streetcar Named Desire, A (1951)
0
      1104
                                                                     Drama
    177593 Three Billboards Outside Ebbing, Missouri (2017)
1
                                                               Crime|Drama
2
      2202
                                              Lifeboat (1944)
                                                               Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
     6460
                              Trial, The (Procès, Le) (1962)
                                                                     Drama
  predicted rating
          4.571135
0
1
           4.518030
2
           4.504782
3
           4.462175
           4.460883
Tops 5 Recommendations for User 477:
  movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
1
                         Guess Who's Coming to Dinner (1967)
2
      3451
                                                                     Drama
                                                   Ran (1985)
3
     1217
                                                                Drama|War
      858
4
                                        Godfather, The (1972) Crime|Drama
  predicted rating
0
           4.659263
1
           4.658092
2
           4.635130
3
           4.623452
4
           4.622061
Tops 5 Recommendations for User 478:
  movieId
     1248
                                          Touch of Evil (1958)
     6104
1
              Monty Python Live at the Hollywood Bowl (1982)
2
   142488
                                              Spotlight (2015)
    27156 Neon Genesis Evangelion: The End of Evangelion...
3
     3451
4
                          Guess Who's Coming to Dinner (1967)
                                   genres predicted rating
0
                Crime|Film-Noir|Thriller
                                                   4.041614
1
                                   Comedy
                                                   3.991774
2
                                 Thriller
                                                   3.978106
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   3.963201
                                                   3.957459
                                    Drama
Tops 5 Recommendations for User 479:
  movieId
                                                         title \
0
      720 Wallace & Gromit: The Best of Aardman Animatio...
1
      1104
                             Streetcar Named Desire, A (1951)
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
3
      898
                               Philadelphia Story, The (1940)
      6460
                                Trial, The (Procès, Le) (1962)
```

genres predicted rating

3

4.119070

```
0
  Adventure | Animation | Comedy
                                         4.484529
1
                         Drama
                                         4.420732
2
                  Crime | Drama
                                         4.391801
3
                                         4.383106
         Comedy | Drama | Romance
4
                         Drama
                                         4.357026
Tops 5 Recommendations for User 480:
   movieId
                                                           title \
0
     1178
                                          Paths of Glory (1957)
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
      750 Dr. Strangelove or: How I Learned to Stop Worr...
3
      1217
                                                      Ran (1985)
      2202
                                                Lifeboat (1944)
                                   genres predicted rating
                                Drama|War
0
                                                    4.306010
1
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                     4.252706
2
                               Comedy|War
                                                    4.225909
3
                                Drama|War
                                                    4.187688
4
                                Drama|War
                                                     4.175365
Tops 5 Recommendations for User 481:
   movieId
                                                           title
                                                                           genres
0
      1041
                                          Secrets & Lies (1996)
                                                                            Drama
1
      3451
                           Guess Who's Coming to Dinner (1967)
                                                                            Drama
2
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                                                       Drama|War
3
      8477
                                               Jetée, La (1962) Romance | Sci-Fi
4
       905
                                   It Happened One Night (1934) Comedy|Romance
   predicted rating
0
           3.963816
1
           3.929425
2
           3.907332
3
           3.906835
           3.899967
Tops 5 Recommendations for User 482:
                                                                          genres
   movieId
                                                          title
    177593
            Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                    Crime | Drama
1
      3200
                                       Last Detail, The (1973)
                                                                   Comedy | Drama
2
      1178
                                         Paths of Glory (1957)
                                                                      Drama|War
3
      8132
                                              Gladiator (1992)
                                                                   Action | Drama
      8477
                                              Jetée, La (1962)
                                                                Romance|Sci-Fi
   predicted rating
0
           4.679831
1
           4.519293
2
           4.504718
3
           4.472304
           4.464979
Tops 5 Recommendations for User 483:
  movieId
    177593
             Three Billboards Outside Ebbing, Missouri (2017)
0
1
      1217
                                                      Ran (1985)
2
      1104
                              Streetcar Named Desire, A (1951)
3
      1178
                                          Paths of Glory (1957)
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                   genres predicted rating
0
                              Crime|Drama
                                                    4.575978
1
                                Drama|War
                                                    4.541381
2
                                     Drama
                                                    4.530163
3
                                Drama|War
                                                    4.511805
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                     4.505122
Tops 5 Recommendations for User 484:
   movieId
                                            title
                                                                  genres
0
      3451
           Guess Who's Coming to Dinner (1967)
                                                                   Drama
1
      3836
                           Kelly's Heroes (1970)
                                                      Action|Comedy|War
2
      3200
                         Last Detail, The (1973)
                                                            Comedy|Drama
3
      2202
                                 Lifeboat (1944)
                                                               Drama|War
```

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predicted rating
           4.715974
           4.658823
1
2
           4.635877
3
           4.620601
           4.618260
4
Tops 5 Recommendations for User 485:
  movieId
                                                          title \
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
1
     3200
                                       Last Detail, The (1973)
2
      6460
                                Trial, The (Procès, Le) (1962)
     27156 Neon Genesis Evangelion: The End of Evangelion...
      1303
                             Man Who Would Be King, The (1975)
                                   genres predicted rating
0
                              Crime|Drama
                                                    4.965326
1
                             Comedy|Drama
                                                    4.948003
2
                                    Drama
                                                    4.926179
3
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.890433
                         Adventure | Drama
Tops 5 Recommendations for User 486:
  movieId
                                                                        genres
                                                          title
0
      1178
                                         Paths of Glory (1957)
                                                                     Drama|War
    177593
1
            Three Billboards Outside Ebbing, Missouri (2017)
                                                                   Crime|Drama
2
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
3
      2360
                              Celebration, The (Festen) (1998)
                                                                         Drama
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                                                     Drama|War
  predicted rating
0
           5.000000
           4.988685
1
2
           4.955304
3
           4.916058
           4.905654
4
Tops 5 Recommendations for User 487:
  movieId
                                                          title
0
      1178
                                         Paths of Glory (1957)
1
      1104
                              Streetcar Named Desire, A (1951)
2
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
3
    27156 Neon Genesis Evangelion: The End of Evangelion...
4
      2360
                              Celebration, The (Festen) (1998)
                                   genres predicted rating
0
                                Drama|War
                                                   3.790997
1
                                    Drama
                                                   3.781220
                              Crime | Drama
                                                   3.777450
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   3.730780
                                    Drama
                                                   3.715930
Tops 5 Recommendations for User 488:
  movieId
0
     1178
                                        Paths of Glory (1957)
    177593
1
           Three Billboards Outside Ebbing, Missouri (2017)
              Monty Python Live at the Hollywood Bowl (1982)
2
3
      5747
                                             Gallipoli (1981)
      1224
                                               Henry V (1989)
                     genres predicted rating
0
                                      4.672064
                  Drama|War
1
                Crime|Drama
                                      4.558714
2
                     Comedy
                                      4.527429
3
                  Drama|War
                                      4.513023
  Action|Drama|Romance|War
                                      4.499607
Tops 5 Recommendations for User 489:
  movieId
                                                          title \
     2202
                                               Lifeboat (1944)
```

Submarine (2010) Comedy | Drama | Romance

87234

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1104
1
                             Streetcar Named Desire, A (1951)
2
      4642
                             Hedwig and the Angry Inch (2000)
3
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
     26810
                                         Bad Boy Bubby (1993)
                        genres predicted rating
                     Drama|War
0
                                        4.146899
1
                                        4.090072
                         Drama
2
         Comedy|Drama|Musical
                                        4.086161
3
                                        4.066995
  Comedy|Crime|Drama|Thriller
                                        4.064111
                        Drama
Tops 5 Recommendations for User 490:
                                                 genres predicted rating
  movieId
                            title
     1178 Paths of Glory (1957)
                                             Drama|War
                                                                 3.964678
1
     89904
                The Artist (2011) Comedy|Drama|Romance
                                                                 3.942299
2
     1217
                       Ran (1985)
                                            Drama|War
                                                                 3.941179
3
      858 Godfather, The (1972)
                                            Crime|Drama
                                                                 3.932064
     1041 Secrets & Lies (1996)
                                                                 3.929166
                                                 Drama
Tops 5 Recommendations for User 491:
  movieId
                                                        title \
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
1
      2202
                                              Lifeboat (1944)
2
     3266 Man Bites Dog (C'est arrivé près de chez vous)...
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
4
     1104
                             Streetcar Named Desire, A (1951)
                                  genres predicted rating
0
                             Crime|Drama
                                                 4.906697
1
                               Drama|War
                                                  4.886771
2
             Comedy|Crime|Drama|Thriller
                                                  4.886645
  Action | Animation | Drama | Fantasy | Sci-Fi
                                                  4.884749
                                   Drama
                                                  4.863585
Tops 5 Recommendations for User 492:
  movieId
                                                         title \
     5500
0
                                           Top Secret! (1984)
1
       28
                                            Persuasion (1995)
2
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
     5915
3
                   Victory (a.k.a. Escape to Victory) (1981)
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
             genres predicted_rating
0
            Comedy 4.847101
1
     Drama|Romance
                             4.815460
2
      Crime|Drama
                             4.804842
3
  Action|Drama|War
                             4.787824
     Drama|Romance
                             4.786782
Tops 5 Recommendations for User 493:
  movieId
                                       title
                                                             genres \
   116897
                           Wild Tales (2014) Comedy|Drama|Thriller
                       Paths of Glory (1957)
1
     1178
                                                          Drama|War
2
     2360 Celebration, The (Festen) (1998)
                                                              Drama
3
                             Lifeboat (1944)
     2202
                                                          Drama|War
4
     3435
                     Double Indemnity (1944) Crime | Drama | Film-Noir
  predicted_rating
0
           4.525615
1
           4.524922
2
           4.464544
           4.460637
3
           4.430565
Tops 5 Recommendations for User 494:
  movieId
                                                         title \
0
     2202
                                              Lifeboat (1944)
1
     1217
                                                   Ran (1985)
2
    27156 Neon Genesis Evangelion: The End of Evangelion...
3
    62336
                                                  FLCL (2000)
4
     2300
                                        Producers, The (1968)
```

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genres predicted_rating
0
                              Drama|War 4.743560
1
                              Drama|War
                                                 4.709932
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                 4.709152
3
        Animation | Comedy | Fantasy | Sci-Fi
                                                 4.680721
4
                                 Comedy
                                                 4.672682
Tops 5 Recommendations for User 495:
  movieId
                                                       title
                                                                   genres \
                            Streetcar Named Desire, A (1951)
0
    1104
                                                                    Drama
                                            Lifeboat (1944) Drama|War
1
     2202
     2239 Swept Away (Travolti da un insolito destino ne... Comedy|Drama
     1217 Ran (1985) Drama|War
1237 Seventh Seal, The (Sjunde inseglet, Det) (1957) Drama
3
  predicted rating
0
          5.000000
          4.922565
1
2
           4.904086
3
           4.884251
           4.845265
Tops 5 Recommendations for User 496:
  movieId
                                               genres predicted_rating
                           title
   1217
0
                     Ran (1985)
                                             Drama|War 4.257670
                                             Drama
    1041 Secrets & Lies (1996)
1
                                                                 4.197269
  159817 Planet Earth (2006) Documentary
2
                                                                4.168685
             Baby Driver (2017) Action|Crime|Thriller
3
   171763
                                                                 4.141246
     1178 Paths of Glory (1957)
                                   Drama|War
                                                                 4.129319
Tops 5 Recommendations for User 497:
                                      title
  movieId
                                                   genres predicted rating
                                 Ran (1985)
     1217
                                                 Drama|War 3.994601
    1104 Streetcar Named Desire, A (1951)
                                                Drama
                                                                    3.988098
1
                           Jetée, La (1962) Romance|Sci-Fi
2
                                                                    3.931129
     8477
                       Reign Over Me (2007) Drama
3
    51931
                                                                    3.921278
     1041
                      Secrets & Lies (1996)
                                                     Drama
                                                                     3.920146
4
Tops 5 Recommendations for User 498:
     vield title genres predicted_rating
3451 Guess Who's Coming to Dinner (1967) Drama 4.949732
2202 Lifeboat (1944) Drama|War 4.893340
  movieId
     2202
1
     1178
2
                         Paths of Glory (1957) Drama|War
                                                                  4.878127
     1104
             Streetcar Named Desire, A (1951) Drama
3
                                                                  4.846580
     2360
              Celebration, The (Festen) (1998) Drama
                                                                  4.821311
Tops 5 Recommendations for User 499:
  movieId
                                                       title \
    6460
                              Trial, The (Procès, Le) (1962)
1
      858
                                       Godfather, The (1972)
2
     8477
                                            Jetée, La (1962)
3
     1178
                                       Paths of Glory (1957)
     61240 Let the Right One In (Låt den rätte komma in) ...
                        genres predicted rating
0
                                4.745870
                         Drama
                                       4.598709
1
                    Crime|Drama
2
                                       4.596902
                Romance|Sci-Fi
                     Drama|War
3
                                        4.585732
  Drama|Fantasy|Horror|Romance
                                        4.579068
Tops 5 Recommendations for User 500:
                             title
  movieId
                                                   genres predicted rating

      3429 Creature Comforts (1989)
      Animation|Comedy
      4.336092

      3030 Yojimbo (1961)
      Action|Adventure
      4.334129

Ω
     3030
1
     1236
                       Trust (1990) Comedy|Drama|Romance
                                                                  4.305348
3
     7748
             Pierrot le fou (1965) Crime|Drama
                                                                  4.282767
     1041
             Secrets & Lies (1996)
                                                   Drama
                                                                  4.270574
Tops 5 Recommendations for User 501:
```

title

genres \

movieId

```
0
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
                                             Gladiator (1992)
1
      8132
                                                                Action|Drama
2
      3200
                                       Last Detail, The (1973)
                                                                Comedy|Drama
3
      1272
                                                 Patton (1970)
                                                                   Drama|War
      1217
                                                    Ran (1985)
4
                                                                    Drama|War
   predicted_rating
0
           4.262496
           4.258862
1
2
           4.226669
3
           4.194356
           4.178805
Tops 5 Recommendations for User 502:
                                                        title
                                                                       genres \
                                                                  Crime|Drama
   177593 Three Billboards Outside Ebbing, Missouri (2017)
1
     2360
                            Celebration, The (Festen) (1998)
                                                                        Drama
                                             Spotlight (2015)
2
    142488
                                                                     Thriller
3
      527
                                     Schindler's List (1993)
                                                                    Drama|War
                                     Funny Games U.S. (2007) Drama|Thriller
     58301
   predicted rating
0
           4.605228
1
           4.510216
2
           4.475497
3
           4.471820
           4.456867
Tops 5 Recommendations for User 503:
  movieId
                                                         title \
0
      2202
                                              Lifeboat (1944)
1
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
2
                             Streetcar Named Desire, A (1951)
      1104
      750 Dr. Strangelove or: How I Learned to Stop Worr...
3
      6460
                               Trial, The (Procès, Le) (1962)
                        genres predicted rating
0
                                        4.435785
                     Drama|War
                                        4.331894
1
  Comedy | Crime | Drama | Thriller
2
                        Drama
                                        4.209657
3
                    Comedy|War
                                        4.169783
4
                         Drama
                                        4.131746
Tops 5 Recommendations for User 504:
  movieId
                                                        title
                                                                     genres \
0
    2202
                                              Lifeboat (1944)
                                                                  Drama|War
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
2
     1104
                            Streetcar Named Desire, A (1951)
3
      3451
                         Guess Who's Coming to Dinner (1967)
      8132
                                             Gladiator (1992) Action|Drama
   predicted rating
0
           4.678740
           4.610721
1
2
           4.572802
3
           4.568761
           4.554498
Tops 5 Recommendations for User 505:
   movieId
                                                        title
                                                                    genres \
0
     1104
                            Streetcar Named Desire, A (1951)
                                                                     Drama
1
      1178
                                        Paths of Glory (1957)
                                                                Drama|War
    177593 Three Billboards Outside Ebbing, Missouri (2017)
2
                                                              Crime|Drama
3
     2202
                                              Lifeboat (1944)
                                                              Drama|War
4
      1041
                                        Secrets & Lies (1996)
                                                                    Drama
   predicted rating
0
           4.876380
1
           4.827015
2
           4.778991
3
           4.777982
           4.752495
```

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Tops 5 Recommendations for User 506:
   movieId
                                           title
                                                                      genres
      1104
               Streetcar Named Desire, A (1951)
                                                                       Drama
      1248
                            Touch of Evil (1958)
                                                  Crime|Film-Noir|Thriller
1
2
      3451 Guess Who's Coming to Dinner (1967)
                                                                       Drama
                              Rear Window (1954)
3
       904
                                                           Mystery|Thriller
4
       162
                                    Crumb (1994)
                                                                Documentary
   predicted_rating
0
           4.180923
1
           4.108533
2
           4.095053
3
           4.094864
           4.093117
Tops 5 Recommendations for User 507:
   movieId
                                                         title \
    177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                          Guess Who's Coming to Dinner (1967)
1
      3451
                                      To Catch a Thief (1955)
2
       933
3
      1178
                                        Paths of Glory (1957)
                                Day of the Doctor, The (2013)
    106642
                            genres predicted_rating
0
                       Crime|Drama
                                            4.264987
1
                             Drama
                                            4.154127
2
  Crime|Mystery|Romance|Thriller
                                            4.138087
3
                         Drama|War
                                            4.137530
4
           Adventure|Drama|Sci-Fi
                                            4.123983
Tops 5 Recommendations for User 508:
   movieId
      3451
0
                           Guess Who's Coming to Dinner (1967)
      1178
                                         Paths of Glory (1957)
1
2
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
      2202
                                                Lifeboat (1944)
      1217
                                                     Ran (1985)
4
                                   genres predicted rating
0
                                    Drama
                                                    3.452473
1
                                Drama|War
                                                    3.352418
2
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                    3.337017
3
                                                    3.321690
                                Drama|War
4
                                Drama|War
                                                    3.317171
Tops 5 Recommendations for User 509:
  movieId
                                                          title
0
     2202
                                               Lifeboat (1944)
1
     1104
                              Streetcar Named Desire, A (1951)
2
     1217
                                                     Ran (1985)
3
            Three Billboards Outside Ebbing, Missouri (2017)
   177593
    27156 Neon Genesis Evangelion: The End of Evangelion...
                                   genres predicted_rating
0
                                Drama|War
                                                    4.181984
1
                                    Drama
                                                    4.133486
2
                                Drama|War
                                                    4.112390
3
                              Crime|Drama
                                                    4.111907
  Action | Animation | Drama | Fantasy | Sci-Fi
Tops 5 Recommendations for User 510:
  movieId
                                                          title \
0
                                         Paths of Glory (1957)
     1178
    177593
1
            Three Billboards Outside Ebbing, Missouri (2017)
2
     4103
                                      Empire of the Sun (1987)
3
     25771
                Andalusian Dog, An (Chien andalou, Un) (1929)
    27156 Neon Genesis Evangelion: The End of Evangelion...
                                   genres predicted rating
0
                                Drama|War
                                                    3.874436
```

Crime | Drama

3.834232

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3
                                 Fantasy
                                                  3.778985
 Action|Animation|Drama|Fantasy|Sci-Fi
                                                  3.774248
Tops 5 Recommendations for User 511:
  movieId
                                                       title
                                                                   genres
                                             Lifeboat (1944)
0
     2202
                                                               Drama|War
     1104
1
                            Streetcar Named Desire, A (1951)
                                                                    Drama
2
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
3
     1178
                                       Paths of Glory (1957)
                                                              Drama|War
      1217
                                                  Ran (1985)
                                                                 Drama|War
  predicted rating
0
           4.823351
           4.737220
1
2
           4.736417
3
           4.716942
           4.688319
Tops 5 Recommendations for User 512:
  movieId
                                                         title \
0
     2202
                                              Lifeboat (1944)
1
      1104
                             Streetcar Named Desire, A (1951)
2
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
3
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
4
      858
                                        Godfather, The (1972)
                        genres predicted_rating
0
                     Drama|War
                                        4.717970
1
                         Drama
                                        4.706841
2
                   Crime|Drama
                                        4.625275
  Comedy|Crime|Drama|Thriller
                                        4.625157
                   Crime|Drama
                                        4.578264
Tops 5 Recommendations for User 513:
  movieId
                                                         title \
   177593
            Three Billboards Outside Ebbing, Missouri (2017)
0
      2202
1
                                              Lifeboat (1944)
2
                               Trial, The (Procès, Le) (1962)
      6460
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
3
    27156 Neon Genesis Evangelion: The End of Evangelion...
                                  genres predicted_rating
0
                             Crime|Drama
                                                  4.557414
1
                                                  4.521653
                               Drama|War
2
                                   Drama
                                                  4.492107
3
             Comedy|Crime|Drama|Thriller
                                                  4.486936
                                                  4.451281
  Action|Animation|Drama|Fantasy|Sci-Fi
Tops 5 Recommendations for User 514:
  movieId
                                                       title
                                                                      genres \
     1104
                            Streetcar Named Desire, A (1951)
1
     1178
                                       Paths of Glory (1957)
                                                                  DramalWar
   177593 Three Billboards Outside Ebbing, Missouri (2017)
2
                                                                Crime|Drama
                                                  Ran (1985)
3
     1217
                                                                   Drama|War
      912
                                           Casablanca (1942) Drama|Romance
  predicted rating
0
           4.240659
1
           4.190822
2
           4.153923
3
           4.142960
           4.134509
Tops 5 Recommendations for User 515:
  movieId
                                                 title \
0
      246
                                    Hoop Dreams (1994)
1
       741 Ghost in the Shell (Kôkaku kidôtai) (1995)
2
      898
                        Philadelphia Story, The (1940)
3
      930
                                      Notorious (1946)
      1041
                                 Secrets & Lies (1996)
```

Action|Adventure|Drama|War

3.786682

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genres predicted rating
0
                  Documentary
1
             Animation|Sci-Fi
2
                                               5
         Comedy | Drama | Romance
3
                                                5
  Film-Noir|Romance|Thriller
                                               5
                         Drama
Tops 5 Recommendations for User 516:
                                                          title \
   movieId
0
    177593
            Three Billboards Outside Ebbing, Missouri (2017)
     27156 Neon Genesis Evangelion: The End of Evangelion...
1
2
      1178
                                         Paths of Glory (1957)
3
      8132
                                              Gladiator (1992)
      2202
                                               Lifeboat (1944)
                                   genres predicted rating
0
                              Crime|Drama
                                                   4.479467
1
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.451612
2
                                Drama|War
                                                    4.437822
3
                                                    4.379389
                             Action|Drama
4
                                Drama|War
                                                    4.368716
Tops 5 Recommendations for User 517:
   movieId
                                     title
                                                                 genres \
0
    106642 Day of the Doctor, The (2013)
                                                Adventure|Drama|Sci-Fi
1
     87234
                         Submarine (2010)
                                                 Comedy|Drama|Romance
2
     73881
                           3 Idiots (2009)
                                                  Comedy|Drama|Romance
3
      1683 Wings of the Dove, The (1997)
                                                          Drama|Romance
       930
                         Notorious (1946) Film-Noir|Romance|Thriller
   predicted rating
           3.786026
           3.629192
1
2
           3.538453
3
           3.518249
4
           3.491120
Tops 5 Recommendations for User 518:
   movieId
0
    27156 Neon Genesis Evangelion: The End of Evangelion...
1
      1236
                                                   Trust (1990)
2
    177593
            Three Billboards Outside Ebbing, Missouri (2017)
3
      1217
                                                     Ran (1985)
4
      5690
               Grave of the Fireflies (Hotaru no haka) (1988)
                                   genres predicted rating
                                                  4.568210
0
  Action|Animation|Drama|Fantasy|Sci-Fi
1
                    Comedy | Drama | Romance
                                                   4.566009
2
                              Crime|Drama
                                                   4.536374
3
                                Drama|War
                     Animation|Drama|War
Tops 5 Recommendations for User 519:
   movieId
                                                                         genres
                                                          title
    177593
             Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                   Crime | Drama
1
      1217
                                                     Ran (1985)
                                                                     Drama|War
2
                                               Lifeboat (1944)
      2202
                                                                     Drama|War
3
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
      3451
                           Guess Who's Coming to Dinner (1967)
   predicted_rating
0
           4.974243
           4.966553
1
2
           4.942157
3
           4.931293
           4.924331
Tops 5 Recommendations for User 520:
   movieId
                                                         title
                                                                        genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                   Crime | Drama
      8477
                                             Jetée, La (1962) Romance | Sci-Fi
1
2
      2202
                                              Lifeboat (1944)
                                                                     Drama|War
```

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3
      1041
                                        Secrets & Lies (1996)
                                                                          Drama
4
      3200
                                      Last Detail, The (1973)
                                                                  Comedy|Drama
   predicted_rating
0
           4.701617
           4.678050
1
2
           4.671132
3
           4.666311
4
           4.658397
Tops 5 Recommendations for User 521:
   movieId
                                                          title
                                                                         genres
     1104
                              Streetcar Named Desire, A (1951)
                                                                         Drama
1
      2202
                                               Lifeboat (1944)
                                                                     Drama|War
    177593
            Three Billboards Outside Ebbing, Missouri (2017)
                                                                    Crime | Drama
3
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                                                      Drama|War
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
   predicted rating
0
           4.762184
1
           4.751714
2
           4.706442
3
           4.669435
           4.668383
Tops 5 Recommendations for User 522:
   movieId
                                 title
                                                           genres
0
      5500
                   Top Secret! (1984)
                                                           Comedy
1
      176 Living in Oblivion (1995)
                                                           Comedy
      1204 Lawrence of Arabia (1962)
                                             Adventure | Drama | War
3
      1217
                            Ran (1985)
                                                        Drama|War
4
      1248
                 Touch of Evil (1958) Crime | Film - Noir | Thriller
   predicted rating
0
           4.472927
           4.450971
1
2
           4.449622
3
           4.445148
4
           4.438627
Tops 5 Recommendations for User 523:
   movieId
                                    title
                                                                     genres
       246
                      Hoop Dreams (1994)
                                                                Documentary
1
       904
                      Rear Window (1954)
                                                          Mystery|Thriller
2
       905 It Happened One Night (1934)
                                                            Comedy|Romance
3
       930
                        Notorious (1946)
                                               Film-Noir|Romance|Thriller
4
       933
                 To Catch a Thief (1955) Crime|Mystery|Romance|Thriller
   predicted rating
0
1
                  5
2
                  5
3
                  5
                  5
Tops 5 Recommendations for User 524:
   movieId
                                                          title \
0
      3451
                           Guess Who's Coming to Dinner (1967)
1
     87234
                                               Submarine (2010)
2
       720 Wallace & Gromit: The Best of Aardman Animatio...
            Three Billboards Outside Ebbing, Missouri (2017)
3
    177593
      2202
                                                Lifeboat (1944)
                        genres predicted rating
0
                         Drama
                                        4.387388
1
         Comedy|Drama|Romance
                                        4.379220
  Adventure | Animation | Comedy
                                        4.355674
3
                  Crime|Drama
                                        4.338904
                     Drama|War
                                        4.318862
Tops 5 Recommendations for User 525:
  movieId
                                                         title
                                                                      genres \
```

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0
                            Streetcar Named Desire, A (1951)
      1104
                                                                      Drama
           Three Billboards Outside Ebbing, Missouri (2017)
1
    177593
                                                              Crime|Drama
2
      1178
                                        Paths of Glory (1957)
3
      6460
                              Trial, The (Procès, Le) (1962)
                                                                     Drama
      1217
                                                   Ran (1985)
4
                                                                 Drama|War
   predicted_rating
           4.379380
0
1
           4.345939
2
           4.319824
3
           4.305295
           4.256464
Tops 5 Recommendations for User 526:
   movieId
     27156 Neon Genesis Evangelion: The End of Evangelion...
1
      2202
                                               Lifeboat (1944)
2
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
3
      3200
                                       Last Detail, The (1973)
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
4
                                   genres predicted_rating
  Action | Animation | Drama | Fantasy | Sci-Fi
                                                   4.790029
1
                               Drama|War
                                                   4.738030
2
                           Drama|Romance
                                                   4.726125
3
                            Comedy|Drama
                                                   4.717154
             Comedy | Crime | Drama | Thriller
                                                   4.712697
Tops 5 Recommendations for User 527:
   movieId
                                                       title
                                                                        genres \
0
      2202
                                             Lifeboat (1944)
                                                                    Drama|War
1
     65642
                     Timecrimes (Cronocrímenes, Los) (2007) Sci-Fi|Thriller
2
      1237 Seventh Seal, The (Sjunde inseglet, Det) (1957)
                                                                        Drama
3
      5500
                                          Top Secret! (1984)
                                                                       Comedv
                             Trial, The (Procès, Le) (1962)
      6460
                                                                        Drama
   predicted rating
0
           4.932670
           4.879048
1
2
           4.871763
3
           4.864943
           4.854994
Tops 5 Recommendations for User 528:
                                                         title
  movieId
                                                                       genres \
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
0
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
1
                                                                   Drama|War
2
      1217
                                                    Ran (1985)
                                                                   Drama|War
3
                              Shawshank Redemption, The (1994) Crime|Drama
      318
      3451
                          Guess Who's Coming to Dinner (1967)
   predicted rating
0
           4.455917
           4.416431
1
2
           4.377161
3
           4.253213
           4.250956
Tops 5 Recommendations for User 529:
   movieId
                                                        title
                                                                     genres
0
      2360
                            Celebration, The (Festen) (1998)
                                                                     Drama
                                                                 Drama|War
1
      1217
                                                   Ran (1985)
2
      1041
                                        Secrets & Lies (1996)
                                                                     Drama
3
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1178
                                        Paths of Glory (1957)
                                                               Drama|War
   predicted rating
0
           4.491904
1
           4.479774
2
           4.477437
3
           4.454829
           4.451191
```

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Tops 5 Recommendations for User 530:
  movieId
                                                       title
                                                                   genres
      1104
                            Streetcar Named Desire, A (1951)
                                                                    Drama
      2202
1
                                             Lifeboat (1944)
                                                                 Drama|War
2
     6460
                              Trial, The (Procès, Le) (1962)
                                                                    Drama
3
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
4
     1217
                                                  Ran (1985)
                                                              Drama|War
  predicted_rating
0
           4.728546
1
           4.699997
2
           4.676614
3
           4.646296
           4.638475
Tops 5 Recommendations for User 531:
  movieId
                                                        title \
0
     6460
                               Trial, The (Procès, Le) (1962)
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
1
2
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
3
     2202
                                              Lifeboat (1944)
      3347
                                        Never Cry Wolf (1983)
            genres predicted_rating
0
                            4.646352
            Drama
1
        Drama|War
                            4.626353
2
                            4.595397
       Crime|Drama
3
        Drama|War
                            4.559649
4 Adventure|Drama
                            4.542211
Tops 5 Recommendations for User 532:
  movieId
                                                       title
                                                                    genres
0
     6460
                              Trial, The (Procès, Le) (1962)
                                                                    Drama
1
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
2
                            Streetcar Named Desire, A (1951)
     1104
3
                         Guess Who's Coming to Dinner (1967)
     3451
                                                                    Drama
     2202
                                             Lifeboat (1944)
                                                              Drama|War
4
  predicted rating
0
           4.896156
1
           4.890337
2
           4.865612
3
           4.845014
4
           4.827713
Tops 5 Recommendations for User 533:
  movieId
                                                 title
                                                                   genres \
0
     1104
                      Streetcar Named Desire, A (1951)
                                                                    Drama
1
      1041
                                 Secrets & Lies (1996)
                                                                    Drama
2
      7121
                                     Adam's Rib (1949)
                                                           Comedy | Romance
                  Guess Who's Coming to Dinner (1967)
      741 Ghost in the Shell (Kôkaku kidôtai) (1995) Animation|Sci-Fi
  predicted rating
0
           4.932610
1
           4.841140
2
           4.784695
3
           4.782364
           4.779911
Tops 5 Recommendations for User 534:
  movieId
                                                       title
                                                                    genres \
                                                                 Drama|War
0
     2202
                                             Lifeboat (1944)
     1104
1
                            Streetcar Named Desire, A (1951)
                                                                    Drama
2
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
3
     1217
                                                  Ran (1985)
     1178
                                       Paths of Glory (1957)
                                                                 Drama|War
  predicted rating
0
          4.732375
           4.668895
1
```

```
3
           4.663625
4
           4.654899
Tops 5 Recommendations for User 535:
  movieId
                                                        title \
0
     2202
                                              Lifeboat (1944)
    27156 Neon Genesis Evangelion: The End of Evangelion...
1
2
     1217
                                                   Ran (1985)
3
     1104
                             Streetcar Named Desire, A (1951)
   106642
4
                                Day of the Doctor, The (2013)
                                  genres predicted rating
0
                               Drama|War
                                                  3.519200
  Action|Animation|Drama|Fantasy|Sci-Fi
1
                                                  3.367385
2
                               Drama|War
                                                  3.364160
3
                                   Drama
                                                  3.357370
4
                  Adventure|Drama|Sci-Fi
                                                  3.354134
Tops 5 Recommendations for User 536:
  movieId
0
     7361
                 Eternal Sunshine of the Spotless Mind (2004)
1
     4021
                                    Before Night Falls (2000)
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
     2202
                                              Lifeboat (1944)
                                                   Ran (1985)
     1217
                                  genres predicted_rating
0
                    Drama|Romance|Sci-Fi
                                                 4.378253
1
                                   Drama
                                                  4.350601
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.344076
3
                               Drama|War
                                                  4.338994
4
                               Drama|War
                                                  4.307953
Tops 5 Recommendations for User 537:
  movieId
                                                         title \
     6460
                               Trial, The (Procès, Le) (1962)
0
     8132
                                             Gladiator (1992)
1
2
    89904
                                            The Artist (2011)
    43376 Sophie Scholl: The Final Days (Sophie Scholl -...
3
4
      246
                                           Hoop Dreams (1994)
                 genres predicted_rating
0
                              4.744714
                 Drama
1
          Action|Drama
                                 4.692464
2
  Comedy|Drama|Romance
                                 4.682853
3
              Drama|War
                                 4.674054
                                 4.669652
            Documentary
Tops 5 Recommendations for User 538:
  movieId
                                                        title \
      930
                                             Notorious (1946)
1
     1217
                                                   Ran (1985)
                                     Creature Comforts (1989)
2
     3429
3
                         Guess Who's Coming to Dinner (1967)
     3451
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                       genres predicted rating
  Film-Noir|Romance|Thriller
1
                    Drama|War
2
                                              5
             Animation | Comedy
                        Drama
                                              5
3
4
                    Drama|War
Tops 5 Recommendations for User 539:
  movieId
                                                        title
                                                                       genres \
           Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
   177593
0
1
                                 It Happened One Night (1934) Comedy | Romance
2
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                   Drama|War
     1104
                             Streetcar Named Desire, A (1951)
                                                                         Drama
```

2

4.665109

```
0
           4.769585
1
           4.699108
2
           4.682068
3
           4.648843
           4.640425
Tops 5 Recommendations for User 540:
  movieId
                                                         title \
    43376 Sophie Scholl: The Final Days (Sophie Scholl -...
0
1
     3019
                                       Drugstore Cowboy (1989)
2
     65642
                       Timecrimes (Cronocrímenes, Los) (2007)
3
     27156 Neon Genesis Evangelion: The End of Evangelion...
     1178
                                         Paths of Glory (1957)
                                   genres predicted rating
0
                                Drama|War
                                                   4.722942
1
                              Crime|Drama
                                                   4.664689
2
                         Sci-Fi|Thriller
                                                   4.664591
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.658065
                                Drama|War
                                                   4.657522
Tops 5 Recommendations for User 541:
  movieId
                                                        title \
0
     8132
                                             Gladiator (1992)
1
    106642
                               Day of the Doctor, The (2013)
2
    3451
                         Guess Who's Coming to Dinner (1967)
3
    177593 Three Billboards Outside Ebbing, Missouri (2017)
    38095
            Bittersweet Life, A (Dalkomhan insaeng) (2005)
                   genres predicted rating
             Action|Drama
                                    4.345430
                                    4.337300
  Adventure | Drama | Sci-Fi
2
                    Drama
                                    4.330417
3
              Crime|Drama
                                    4.302958
                                    4.302714
4
      Action|Crime|Drama
Tops 5 Recommendations for User 542:
  movieId
      720 Wallace & Gromit: The Best of Aardman Animatio...
0
1
      3200
                                       Last Detail, The (1973)
                                     Living in Oblivion (1995)
2
       176
3
      930
                                              Notorious (1946)
4
      3451
                          Guess Who's Coming to Dinner (1967)
                       genres predicted rating
0
  Adventure | Animation | Comedy
                                 4.570482
1
                 Comedy|Drama
                                        4.489348
2
                       Comedy
                                        4.470939
3
  Film-Noir|Romance|Thriller
                                        4.461412
                        Drama
Tops 5 Recommendations for User 543:
  movieId
                                           title
                                                                   genres \
                             Hoop Dreams (1994)
0
      246
                                                             Documentary
1
       318
               Shawshank Redemption, The (1994)
                                                              Crime | Drama
       390 Faster Pussycat! Kill! Kill! (1965)
2
                                                     Action|Crime|Drama
3
                     Singin' in the Rain (1952) Comedy|Musical|Romance
      899
      904
4
                             Rear Window (1954)
                                                        Mystery|Thriller
  predicted rating
0
                  5
1
                  5
2
                  5
3
                  5
Tops 5 Recommendations for User 544:
  movieId
                                     Living in Oblivion (1995)
      176
1
       246
                                            Hoop Dreams (1994)
2
      318
                              Shawshank Redemption, The (1994)
```

predicted rating

```
3
           Dr. Strangelove or: How I Learned to Stop Worr...
4
       933
                                       To Catch a Thief (1955)
                            genres predicted rating
0
                            Comedy
1
                                                    5
                       Documentary
2
                                                    5
                       Crime | Drama
                                                    5
3
                        Comedy|War
                                                    5
   Crime | Mystery | Romance | Thriller
Tops 5 Recommendations for User 545:
   movieId
                                                          title
      1041
                                         Secrets & Lies (1996)
1
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
      1104
                              Streetcar Named Desire, A (1951)
3
      1217
                                                     Ran (1985)
4
      3429
                                      Creature Comforts (1989)
             genres predicted rating
0
              Drama
                              4.670319
1
          Drama|War
                              4.640946
2
              Drama
                              4.599347
3
          Drama|War
                              4.593287
   Animation | Comedy
                              4.586039
Tops 5 Recommendations for User 546:
   movieId
                                                          title \
0
      7008
           Last Tango in Paris (Ultimo tango a Parigi) (1...
1
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
2
      1178
                                         Paths of Glory (1957)
3
      2202
                                                Lifeboat (1944)
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                   genres predicted rating
0
                            Drama|Romance
                                                   4.437485
1
                                                    4.361358
                                Drama|War
2
                                Drama|War
                                                    4.320391
3
                                                    4.304271
                                Drama|War
   Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.289000
Tops 5 Recommendations for User 547:
   movieId
                                                          title
0
      2202
                                               Lifeboat (1944)
1
    177593
            Three Billboards Outside Ebbing, Missouri (2017)
2
      1104
                              Streetcar Named Desire, A (1951)
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
      3435
4
                                       Double Indemnity (1944)
                                   genres predicted rating
0
                                Drama|War
1
                              Crime|Drama
                                    Drama
                                                    4.729775
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.664901
                   Crime|Drama|Film-Noir
                                                    4.641561
Tops 5 Recommendations for User 548:
   movieId
                                                          title \
0
      1104
                              Streetcar Named Desire, A (1951)
1
    177593
            Three Billboards Outside Ebbing, Missouri (2017)
2
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
3
      3019
                                       Drugstore Cowboy (1989)
      6791
                   Babette's Feast (Babettes gæstebud) (1987)
                         genres predicted rating
0
                                         5.000000
                         Drama
                                         5.000000
1
                   Crime|Drama
   Comedy|Crime|Drama|Thriller
                                         4.979165
3
                   Crime|Drama
                                         4.975819
                         Drama
                                         4.958255
Tops 5 Recommendations for User 549:
```

ps 5 Recommendations for User 549: movieId

```
0
                                  Last Detail, The (1973)
                                                               Comedy|Drama
           Andalusian Dog, An (Chien andalou, Un) (1929)
1
     25771
                                                                     Fantasy
2
      7121
                                        Adam's Rib (1949)
                                                             Comedy|Romance
3
     26810
                                     Bad Boy Bubby (1993)
                                                                      Drama
      3347
                                     Never Cry Wolf (1983) Adventure | Drama
4
   predicted_rating
0
           4.263662
1
           4.240250
2
           4.239726
3
           4.062147
           4.048072
Tops 5 Recommendations for User 550:
   movieId
                                                        title \
      3836
                                        Kelly's Heroes (1970)
1
      3451
                         Guess Who's Coming to Dinner (1967)
2
    177593 Three Billboards Outside Ebbing, Missouri (2017)
3
     3200
                                      Last Detail, The (1973)
      2202
                                              Lifeboat (1944)
4
              genres predicted_rating
  Action|Comedy|War
                              4.697079
1
               Drama
                              4.663690
2
         Crime|Drama
                              4.635300
3
        Comedy|Drama
                              4.625714
           Drama|War
                              4.604355
Tops 5 Recommendations for User 551:
  movieId
                                    title
                                                                genres \
0
       930
                         Notorious (1946) Film-Noir|Romance|Thriller
1
      3200
                  Last Detail, The (1973)
                                                          Comedy|Drama
2
                   Secrets & Lies (1996)
      1041
                                                                 Drama
                  Good bye, Lenin! (2003)
3
      7323
                                                          ComedvlDrama
   106642 Day of the Doctor, The (2013)
                                              Adventure|Drama|Sci-Fi
   predicted rating
0
           4.522583
           4.495354
1
2
           4.460849
3
           4.398819
           4.378502
Tops 5 Recommendations for User 552:
  movieId
                                                         title \
0
    2202
                                              Lifeboat (1944)
1
     1178
                                         Paths of Glory (1957)
2
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
3
     1104
                             Streetcar Named Desire, A (1951)
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                  genres predicted rating
0
                                DramalWar
                                                  4.248071
1
                                Drama|War
                                                   4.220905
2
                             Crime|Drama
                                                   4.127131
3
                                    Drama
                                                   4.099724
   Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.095995
Tops 5 Recommendations for User 553:
   movieId
                                                        title
                                                                    genres \
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                            Streetcar Named Desire, A (1951)
                                        Paths of Glory (1957)
2
      1178
                                                                 Drama|War
3
      2202
                                              Lifeboat (1944)
                                                                Drama|War
4
      3451
                         Guess Who's Coming to Dinner (1967)
                                                                     Drama
   predicted rating
0
           4.896005
1
           4.884562
2
           4.872956
3
           4.864572
4
           4.848444
```

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Tops 5 Recommendations for User 554:
   movieId
      2202
                          Lifeboat (1944)
      3200
                  Last Detail, The (1973)
1
2
     1272
                            Patton (1970)
3
    67618
                   Strictly Sexual (2008)
4
   126921 The Fox and the Hound 2 (2006)
                                genres predicted_rating
0
                             Drama|War 4.934365
1
                          Comedy|Drama
                                               4.867852
2
                             Drama|War
                                               4.799202
3
                  Comedy | Drama | Romance
  Adventure | Animation | Children | Comedy
Tops 5 Recommendations for User 555:
  movieId
                                                        title \
0
     2239 Swept Away (Travolti da un insolito destino ne...
                          Guess Who's Coming to Dinner (1967)
1
     3451
2
     27156 Neon Genesis Evangelion: The End of Evangelion...
3
     1217
                                                   Ran (1985)
     1104
                             Streetcar Named Desire, A (1951)
                                  genres predicted_rating
0
                            Comedy|Drama
                                                 4.570225
1
                                   Drama
                                                 4.558854
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                 4.521751
3
                               Drama|War
                                                 4.515077
4
                                   Drama
                                                  4.491209
Tops 5 Recommendations for User 556:
   movieId
    27156 Neon Genesis Evangelion: The End of Evangelion...
     1104
                             Streetcar Named Desire, A (1951)
1
2
     1217
                                                  Ran (1985)
3
     2202
                                              Lifeboat (1944)
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
4
                                  genres predicted rating
  Action | Animation | Drama | Fantasy | Sci-Fi
                                                 5.000000
1
                                  Drama
                                                 4.982757
2
                               Drama|War
                                                 4.902067
3
                               Drama|War
                                                 4.885356
4
                             Crime|Drama
                                                 4.872896
Tops 5 Recommendations for User 557:
  movieId
                                                       title
                                                                     genres \
0
    8477
                                            Jetée, La (1962) Romance|Sci-Fi
1
    25771 Andalusian Dog, An (Chien andalou, Un) (1929) Fantasy
   177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                        Guess Who's Coming to Dinner (1967)
    3451
     1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
   predicted rating
           4.783222
0
1
           4.779233
2
           4.750582
3
           4.710247
           4.708643
Tops 5 Recommendations for User 558:
  movieId
                                                        title \
0
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
      4642
                             Hedwig and the Angry Inch (2000)
1
2
     5690
             Grave of the Fireflies (Hotaru no haka) (1988)
3
     43376 Sophie Scholl: The Final Days (Sophie Scholl -...
     2360
                             Celebration, The (Festen) (1998)
                 genres predicted rating
          Drama|Romance
                                4.972295
  Comedy|Drama|Musical
                                4.956245
```

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3
             Drama|War
                                 4.913420
4
                 Drama
                                 4.908983
Tops 5 Recommendations for User 559:
                                                                   genres \
  movieId
                                                      title
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
     1217
1
                                                  Ran (1985) Drama|War
                                       Paths of Glory (1957)
2
     1178
                                                               Drama|War
                                                              Drama|War
3
     2202
                                             Lifeboat (1944)
     8132
                                            Gladiator (1992) Action|Drama
4
  predicted rating
          4.327654
           4.315301
1
2
          4.286128
3
           4.270758
           4.264296
Tops 5 Recommendations for User 560:
  movieId
                                                       title
                                                                   genres \
                                                               Drama|War
0
                                             Lifeboat (1944)
     2202
1
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
                                                                    Drama
3
     6460
                              Trial, The (Procès, Le) (1962)
                                                                    Drama
     1178
                                       Paths of Glory (1957)
                                                             Drama|War
  predicted_rating
0
          4.337023
1
           4.309233
2
           4.298127
3
          4.273934
           4.265587
Tops 5 Recommendations for User 561:
  movieId
                                                        title \
    27156 Neon Genesis Evangelion: The End of Evangelion...
     2202
1
                                             Lifeboat (1944)
2
     3266 Man Bites Dog (C'est arrivé près de chez vous)...
3
    51931
                                        Reign Over Me (2007)
4
     1178
                                        Paths of Glory (1957)
                                  genres predicted_rating
0
 Action|Animation|Drama|Fantasy|Sci-Fi
                                            4.204930
1
                              Drama|War
                                                 4.179762
2
             Comedy|Crime|Drama|Thriller
                                                 4.131289
3
                                  Drama
                                                  4.127960
                               Drama|War
                                                  4.106026
Tops 5 Recommendations for User 562:
  movieId
     1104
                            Streetcar Named Desire, A (1951)
   177593 Three Billboards Outside Ebbing, Missouri (2017)
2
    3200
                                    Last Detail, The (1973)
                               Day of the Doctor, The (2013)
3
   106642
4
     1178
                                       Paths of Glory (1957)
                   genres predicted rating
0
                                  4.805534
                    Drama
1
                                   4.789046
             Crime|Drama
2
            Comedy|Drama
                                  4.771123
  Adventure|Drama|Sci-Fi
                                  4.733702
                                   4.714607
                Drama|War
Tops 5 Recommendations for User 563:
  movieId
                                                        title \
0
     1104
                             Streetcar Named Desire, A (1951)
1
     3266 Man Bites Dog (C'est arrivé près de chez vous)...
                                              Lifeboat (1944)
    27156 Neon Genesis Evangelion: The End of Evangelion...
   177593 Three Billboards Outside Ebbing, Missouri (2017)
```

4.928771

2

Animation|Drama|War

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0
                                    Drama
                                                   4.266082
1
             Comedy|Crime|Drama|Thriller
                                                    4.171819
2
                                Drama|War
                                                    4.171537
3
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.160585
                              Crime|Drama
                                                    4.158480
Tops 5 Recommendations for User 564:
   movieId
                                                          title \
0
     1104
                              Streetcar Named Desire, A (1951)
1
     1178
                                         Paths of Glory (1957)
2
   116897
                                             Wild Tales (2014)
3
      2202
                                               Lifeboat (1944)
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                   genres predicted rating
0
                                                    4.508343
                                    Drama
1
                                Drama|War
                                                    4.502257
2
                   Comedy|Drama|Thriller
                                                    4.449016
3
                                Drama|War
                                                    4.428923
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.424924
Tops 5 Recommendations for User 565:
   movieId
                                                          title \
                                         Paths of Glory (1957)
0
     1178
1
    177593
            Three Billboards Outside Ebbing, Missouri (2017)
2
     2202
                                               Lifeboat (1944)
3
     1104
                              Streetcar Named Desire, A (1951)
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                   genres predicted rating
0
                                Drama|War
                                                   4.614853
1
                              Crime | Drama
                                                   4.593841
2
                                Drama|War
                                                   4.554441
3
                                    Drama
                                                    4.540292
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.516720
Tops 5 Recommendations for User 566:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                 Crime | Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
                          Guess Who's Coming to Dinner (1967)
2
      3451
                                                                       Drama
3
      3200
                                      Last Detail, The (1973)
                                                               Comedy|Drama
4
       176
                                    Living in Oblivion (1995)
   predicted_rating
0
           4.627124
1
           4.435097
2
           4.428961
3
           4.415048
           4.408593
Tops 5 Recommendations for User 567:
   movieId
                                      title
                                                                   genres \
      6460 Trial, The (Procès, Le) (1962)
0
                                                                    Drama
            Day of the Doctor, The (2013)
1
    106642
                                                 Adventure|Drama|Sci-Fi
                          Fight Club (1999) Action|Crime|Drama|Thriller
2
      2959
3
      1836 Last Days of Disco, The (1998)
                                                             Comedy | Drama
                    Wild Bunch, The (1969)
4
                                                       Adventure|Western
   predicted_rating
0
           3.615789
           3.570148
1
2
           3.495103
3
           3.488178
           3.469420
Tops 5 Recommendations for User 568:
   movieId
                                                         title \
      2202
                                              Lifeboat (1944)
1
      1178
                                        Paths of Glory (1957)
2
      1248
                                         Touch of Evil (1958)
```

genres predicted rating

```
3
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
4
       318
                             Shawshank Redemption, The (1994)
                      genres predicted_rating
0
                  Drama|War
                                      4.749659
1
                  Drama|War
                                      4.722242
   Crime|Film-Noir|Thriller
2
                                      4.715070
3
                Crime|Drama
                                      4.700144
4
                Crime|Drama
                                      4.674641
Tops 5 Recommendations for User 569:
   movieId
                                                         title
     1178
                                        Paths of Glory (1957)
1
    54190
                                   Across the Universe (2007)
2
      3451
                          Guess Who's Coming to Dinner (1967)
3
    177593 Three Billboards Outside Ebbing, Missouri (2017)
4
      8132
                                             Gladiator (1992)
                           genres predicted rating
0
                        Drama|War
                                           4.815881
1
   Drama|Fantasy|Musical|Romance
                                           4.794859
2
                            Drama
                                           4.776959
3
                      Crime | Drama
                                           4.776718
                    Action|Drama
                                           4.762977
Tops 5 Recommendations for User 570:
   movieId
                                                          title \
0
     2202
                                               Lifeboat (1944)
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
    43376 Sophie Scholl: The Final Days (Sophie Scholl -...
3
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
     1104
                              Streetcar Named Desire, A (1951)
                                   genres predicted rating
0
                                                   4.134423
                                Drama|War
                                                    4.088941
1
   Action|Animation|Drama|Fantasy|Sci-Fi
2
                                                    4.085490
                                Drama|War
3
                              Crime | Drama
                                                    4.076674
4
                                    Drama
                                                    4.076627
Tops 5 Recommendations for User 571:
   movieId
                                                          title
     27156 Neon Genesis Evangelion: The End of Evangelion...
1
      6666 Discreet Charm of the Bourgeoisie, The (Charme...
2
      1104
                              Streetcar Named Desire, A (1951)
3
   177593
            Three Billboards Outside Ebbing, Missouri (2017)
    87234
4
                                              Submarine (2010)
                                   genres predicted rating
   Action|Animation|Drama|Fantasy|Sci-Fi
1
                     Comedy | Drama | Fantasy
                                                   3.834335
2
                                    Drama
                                                   3.818840
3
                              Crime|Drama
                                                    3.791278
                    Comedy | Drama | Romance
                                                    3.780447
Tops 5 Recommendations for User 572:
   movieId
                                                          title \
0
      1178
                                         Paths of Glory (1957)
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
      4642
                              Hedwig and the Angry Inch (2000)
3
      1104
                              Streetcar Named Desire, A (1951)
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                   genres predicted rating
0
                                Drama|War
                                                   4.921485
1
   Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.874229
2
                    Comedy|Drama|Musical
                                                   4.858575
3
                                    Drama
                                                    4.827013
                              Crime | Drama
                                                    4.774518
Tops 5 Recommendations for User 573:
                                                          title \
```

movieId

```
0
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
1
    177593
            Three Billboards Outside Ebbing, Missouri (2017)
2
     3019
                                      Drugstore Cowboy (1989)
3
    148881
                                     World of Tomorrow (2015)
4
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                  genres predicted_rating
0
             Comedy|Crime|Drama|Thriller
                                                  4.942814
                                                  4.934439
1
                             Crime|Drama
2
                             Crime|Drama
                                                  4.910233
3
                        Animation | Comedy
                                                  4.899610
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.884280
Tops 5 Recommendations for User 574:
   movieId
                                                       title
                                                                     genres \
     1217
                                                  Ran (1985)
                                                                Drama|War
1
     8132
                                            Gladiator (1992) Action|Drama
2
     1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
3
                         Guess Who's Coming to Dinner (1967)
      3451
                                                                      Drama
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
   predicted rating
0
           4.896439
1
           4.861557
2
           4.833639
3
           4.827604
           4.809455
Tops 5 Recommendations for User 575:
   movieId
                                          title
                                                                genres \
0
      2202
                                Lifeboat (1944)
                                                            Drama|War
1
      3019
                        Drugstore Cowboy (1989)
                                                          Crime|Drama
2
     1178
                         Paths of Glory (1957)
                                                            Drama|War
3
      3451 Guess Who's Coming to Dinner (1967)
                                                                 Drama
     1236
                                   Trust (1990) Comedy|Drama|Romance
   predicted rating
0
           4.558281
1
           4.490577
2
           4.470640
3
           4.398424
           4.365184
Tops 5 Recommendations for User 576:
                                                                       genres \
  movieId
                                                        title
0
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                  Crime|Drama
1
     1178
                                        Paths of Glory (1957)
                                                                   Drama|War
2
      905
                                 It Happened One Night (1934) Comedy|Romance
3
      1217
                                                   Ran (1985)
      7008 Last Tango in Paris (Ultimo tango a Parigi) (1... Drama|Romance
   predicted rating
0
           4.258590
           4.247391
1
2
           4.218081
3
           4.212821
           4.210468
Tops 5 Recommendations for User 577:
   movieId
                                                         title \
0
     2202
                                              Lifeboat (1944)
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
     1178
                                        Paths of Glory (1957)
           Three Billboards Outside Ebbing, Missouri (2017)
3
    177593
4
       246
                                           Hoop Dreams (1994)
                                  genres predicted rating
0
                               Drama|War
                                                  4.413870
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                  4.295242
2
                               Drama|War
                                                  4.267198
3
                             Crime|Drama
                                                  4.254266
4
                             Documentary
                                                   4.251530
```

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Tops 5 Recommendations for User 578:
   movieId
                                                         title \
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                             Streetcar Named Desire, A (1951)
1
      1104
2
      1178
                                        Paths of Glory (1957)
3
      3200
                                      Last Detail, The (1973)
4
      2959
                                            Fight Club (1999)
                        genres predicted rating
0
                                         4.907749
                   Crime|Drama
1
                         Drama
                                         4.839642
2
                     Drama|War
                                         4.823812
3
                  Comedy | Drama
                                         4.811612
  Action|Crime|Drama|Thriller
                                         4.798494
Tops 5 Recommendations for User 579:
   movieId
                                                         title
                                                                      genres \
0
     1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
1
      6460
                               Trial, The (Procès, Le) (1962)
                                                                       Drama
                                             Spotlight (2015)
2
    142488
                                                                    Thriller
3
      3200
                                      Last Detail, The (1973)
                                                               Comedy|Drama
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
   predicted_rating
0
           4.923193
           4.920065
1
2
           4.889528
3
           4.864448
4
           4.853909
Tops 5 Recommendations for User 580:
   movieId
0
      2239
           Swept Away (Travolti da un insolito destino ne...
1
     65642
                       Timecrimes (Cronocrímenes, Los) (2007)
2
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
3
      1041
                                         Secrets & Lies (1996)
       741
                   Ghost in the Shell (Kôkaku kidôtai) (1995)
4
                        genres predicted rating
0
                  Comedy|Drama
                                         4.429799
1
               Sci-Fi|Thriller
                                         4.325095
2
  Comedy | Crime | Drama | Thriller
                                         4.316632
3
                                         4.312837
                         Drama
4
              Animation|Sci-Fi
                                         4.307365
Tops 5 Recommendations for User 581:
  movieId
                                                         title
                                                                     genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      3451
                          Guess Who's Coming to Dinner (1967)
                                                                      Drama
3
      6460
                               Trial, The (Procès, Le) (1962)
                                                                      Drama
                                              Lifeboat (1944)
      2202
                                                               Drama|War
   predicted rating
           4.802625
0
1
           4.795833
2
           4.794696
3
           4.773161
           4.737006
Tops 5 Recommendations for User 582:
   movieId
                                                         title \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
1
      1104
                            Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
3
    106642
                                Day of the Doctor, The (2013)
4
     7121
                                            Adam's Rib (1949)
                   genres predicted rating
0
              Crime|Drama
                                    4.611760
1
                    Drama
                                    4.539343
```

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3
 Adventure|Drama|Sci-Fi
                                  4.496516
      Comedy|Romance
                                  4.494737
Tops 5 Recommendations for User 583:
  movieId
                                                       title \
0
    26810
                                        Bad Boy Bubby (1993)
     1104
1
                            Streetcar Named Desire, A (1951)
2
     2202
                                             Lifeboat (1944)
3
     3266 Man Bites Dog (C'est arrivé près de chez vous)...
     5747
                                            Gallipoli (1981)
4
                        genres predicted rating
0
                        Drama
                                       4.251661
1
                        Drama
                                       4.215914
2
                    Drama|War
                                       4.171217
3
  Comedy|Crime|Drama|Thriller
                                       4.143085
4
                     Drama|War
                                       4.111237
Tops 5 Recommendations for User 584:
  movieId
0
   159817
                                      Planet Earth (2006)
1
    89759 Separation, A (Jodaeiye Nader az Simin) (2011)
2
                                  Last Detail, The (1973)
3
   124404
                      Snowflake, the White Gorilla (2011)
4
   8477
                                         Jetée, La (1962)
                               genres predicted_rating
0
                           Documentary
                                          4.937861
1
                                Drama
                                               4.921369
2
                          Comedy|Drama
                                               4.912733
 Adventure | Animation | Children | Comedy
                                               4.902894
                       Romance|Sci-Fi
                                               4.901418
Tops 5 Recommendations for User 585:
  movieId
                                                        title \
                            Streetcar Named Desire, A (1951)
0
     1104
   177593 Three Billboards Outside Ebbing, Missouri (2017)
1
2
                         Guess Who's Coming to Dinner (1967)
     3451
3
     1178
                                       Paths of Glory (1957)
    27156 Neon Genesis Evangelion: The End of Evangelion...
                                 genres predicted_rating
0
                                  Drama 4.925880
1
                             Crime|Drama
                                                 4.886166
2
                                  Drama
                                                 4.834353
3
                              Drama|War
                                                 4.811567
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                 4.797180
Tops 5 Recommendations for User 586:
  movieId
                                         title
                                                   genres predicted rating
     1104 Streetcar Named Desire, A (1951)
                                                   Drama
                         Paths of Glory (1957) Drama|War
1
     1178
                               Lifeboat (1944) Drama|War
2
     2202
     3451 Guess Who's Coming to Dinner (1967) Drama
3
               Trial, The (Procès, Le) (1962)
                                                   Drama
Tops 5 Recommendations for User 587:
  movieId
                                        title
                                                       genres
0
     1104
             Streetcar Named Desire, A (1951)
                                                        Drama
1
   159817
                          Planet Earth (2006)
                                   arth (2006) Documentary
Ran (1985) Drama|War
                                                  Documentary
2
     1217
3
     7121
                            Adam's Rib (1949) Comedy|Romance
                                                       Drama
     2131 Autumn Sonata (Höstsonaten) (1978)
  predicted rating
0
          4.841625
1
          4.713094
2
          4.690305
3
           4.685530
4
           4.681366
```

4.533706

Drama|War

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Tops 5 Recommendations for User 588:
   movieId
                                       title
                                                  genres predicted_rating
                                             Drama|War
0
     1178
                      Paths of Glory (1957)
                                                          4.303973
1
      858
                       Godfather, The (1972) Crime|Drama
                                                                   4.217902
2
                               Crumb (1994) Documentary
      162
                                                                   4.203016
3
            Trial, The (Procès, Le) (1962)
      6460
                                                Drama
                                                                   4.186963
4
      2360 Celebration, The (Festen) (1998)
                                                   Drama
                                                                   4.177935
Tops 5 Recommendations for User 589:
  movieId
                                                        title \
0
    7121
                                            Adam's Rib (1949)
   177593 Three Billboards Outside Ebbing, Missouri (2017)
1
2
     8477
                                             Jetée, La (1962)
3
     3451
                         Guess Who's Coming to Dinner (1967)
     27156 Neon Genesis Evangelion: The End of Evangelion...
                                  genres predicted rating
0
                          Comedy|Romance
                                                 4.695152
1
                             Crime|Drama
                                                  4.684767
2
                          Romance|Sci-Fi
                                                 4.667590
3
                                   Drama
  Action|Animation|Drama|Fantasy|Sci-Fi
Tops 5 Recommendations for User 590:
   movieId
                                                        title \
    1178
                                        Paths of Glory (1957)
0
     1104
1
                             Streetcar Named Desire, A (1951)
2
   177593 Three Billboards Outside Ebbing, Missouri (2017)
3
   27156 Neon Genesis Evangelion: The End of Evangelion...
4
     1217
                                                  Ran (1985)
                                  genres predicted rating
0
                               Drama|War
                                                 4.235382
1
                                   Drama
                                                  4.181734
2
                             Crime|Drama
                                                 4.171860
3
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                 4.164656
4
                               Drama|War
                                                  4.139284
Tops 5 Recommendations for User 591:
   movieId
                                                        title \
0
      3200
                                     Last Detail, The (1973)
1
      3451
                         Guess Who's Coming to Dinner (1967)
2
   177593
           Three Billboards Outside Ebbing, Missouri (2017)
3
     1250
                        Bridge on the River Kwai, The (1957)
    27156 Neon Genesis Evangelion: The End of Evangelion...
4
                                  genres predicted_rating
0
                            Comedy|Drama 4.203553
1
                                  Drama
                                                 4.159014
2
                             Crime|Drama
3
                     Adventure|Drama|War
  Action | Animation | Drama | Fantasy | Sci-Fi
                                                  4.092409
Tops 5 Recommendations for User 592:
  movieId
                                                        title \
0
     2202
                                             Lifeboat (1944)
1
      5500
                                           Top Secret! (1984)
2
     3451
                          Guess Who's Coming to Dinner (1967)
3
     51931
                                         Reign Over Me (2007)
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
                        genres predicted_rating
0
                     Drama|War
                                       4.687410
1
                        Comedy
                                       4.682401
2
                                       4.661436
                         Drama
3
                         Drama
                                       4.632915
  Comedy|Crime|Drama|Thriller
                                        4.630780
Tops 5 Recommendations for User 593:
  movieId
     1178
                                        Paths of Glory (1957)
     27156 Neon Genesis Evangelion: The End of Evangelion...
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2
             All About My Mother (Todo sobre mi madre) (1999)
      3083
3
      2202
                                               Lifeboat (1944)
4
      1248
                                          Touch of Evil (1958)
                                   genres predicted_rating
                                Drama|War
                                                  4.411668
1
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.206865
2
                                                   4.188815
                                   Drama
3
                                Drama|War
                                                   4.156010
                Crime|Film-Noir|Thriller
4
                                                   4.152195
Tops 5 Recommendations for User 594:
  movieId
                                                         title
   114935
                                         Predestination (2014)
     3341
1
                                         Born Yesterday (1950)
                                              Notorious (1946)
2
       930
3
     54190
                                    Across the Universe (2007)
     74668 District 13: Ultimatum (Banlieue 13 - Ultimatu...
                           genres predicted rating
  Action|Mystery|Sci-Fi|Thriller
                                            4.895833
1
                                            4.885811
                           Comedy
2
                                           4.880570
       Film-Noir|Romance|Thriller
3
    Drama|Fantasy|Musical|Romance
                                            4.873127
4
                                            4.864429
                    Action|Sci-Fi
Tops 5 Recommendations for User 595:
  movieId
                                                         title \
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
0
1
     27156 Neon Genesis Evangelion: The End of Evangelion...
2
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
3
     1104
                             Streetcar Named Desire, A (1951)
      905
                                  It Happened One Night (1934)
                                  genres predicted rating
0
                           Drama|Romance
                                                  5.000000
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   5.000000
1
2
                                                   5.000000
                             Crime|Drama
3
                                                   4.994709
                                   Drama
4
                          Comedy | Romance
                                                   4.990355
Tops 5 Recommendations for User 596:
   movieId
                                                        title
                                                                   genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
      2202
                                              Lifeboat (1944) Drama|War
2
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
3
      1104
                            Streetcar Named Desire, A (1951)
                                                                    Drama
      6460
                                                                     Drama
                              Trial, The (Procès, Le) (1962)
   predicted rating
0
           4.329993
           4.329933
1
2
           4.296331
3
           4.284662
           4.266346
Tops 5 Recommendations for User 597:
   movieId
0
     27156 Neon Genesis Evangelion: The End of Evangelion...
1
                                         Paths of Glory (1957)
      1178
      1104
                             Streetcar Named Desire, A (1951)
3
      3266 Man Bites Dog (C'est arrivé près de chez vous)...
      2202
                                               Lifeboat (1944)
                                   genres predicted rating
  Action|Animation|Drama|Fantasy|Sci-Fi
0
                                                  4.939059
1
                                Drama|War
                                                   4.920053
2
                                    Drama
                                                   4.902976
3
             Comedy|Crime|Drama|Thriller
                                                   4.890289
                                Drama|War
                                                   4.860453
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Tops 5 Recommendations for User 598:

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0
   142422
                                      The Night Before (2015)
1
    27156 Neon Genesis Evangelion: The End of Evangelion...
2
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
3
     1104
                             Streetcar Named Desire, A (1951)
     26810
                                         Bad Boy Bubby (1993)
                                  genres predicted rating
0
                                  Comedy
                                              4.391430
1
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                   4.317043
2
                                                   4.287478
                             Crime|Drama
3
                                   Drama
                                                   4.245411
4
                                   Drama
                                                   4.245311
Tops 5 Recommendations for User 599:
  movieId
                                                        title
                                                                    genres \
0
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                   Ran (1985)
1
      1217
                                                               Drama|War
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
      6460
                              Trial, The (Procès, Le) (1962)
                                                                    Drama
                            Celebration, The (Festen) (1998)
4
      2360
                                                                     Drama
   predicted rating
0
           3.717369
1
           3.691173
2
           3.663075
3
           3.613768
4
           3.606648
Tops 5 Recommendations for User 600:
   movieId
                                                        title \
0
     2202
                                              Lifeboat (1944)
    177593 Three Billboards Outside Ebbing, Missouri (2017)
1
2
     3200
                                     Last Detail, The (1973)
                              Trial, The (Procès, Le) (1962)
3
     6460
     89904
                                           The Artist (2011)
4
                 genres predicted rating
0
              Drama|War
                                 4.108717
1
            Crime|Drama
                                 4.062524
2
           Comedy|Drama
                                 3.970849
3
                  Drama
                                 3.967913
  Comedy | Drama | Romance
                                 3.967852
Tops 5 Recommendations for User 601:
  movieId
                                                        title
                                                                   genres \
Ω
    2202
                                              Lifeboat (1944)
                                                                 Drama|War
     1104
                            Streetcar Named Desire, A (1951)
1
                                                                    Drama
2
     1217
                                                  Ran (1985)
                                                                Drama|War
3
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
     1237 Seventh Seal, The (Sjunde inseqlet, Det) (1957)
   predicted rating
0
           4.857864
           4.845782
1
2
           4.842091
3
           4.818820
           4.818552
Tops 5 Recommendations for User 602:
  movieId
                                                        title
                                                                    genres \
0
      5500
                                          Top Secret! (1984)
                                                                    Comedy
    177593 Three Billboards Outside Ebbing, Missouri (2017)
1
                                                              Crime|Drama
                                             Lifeboat (1944)
2
      2202
                                                              Drama|War
3
      1104
                            Streetcar Named Desire, A (1951)
                                                                    Drama
4
      6460
                                                                    Drama
                              Trial, The (Procès, Le) (1962)
   predicted rating
0
           4.332010
1
           4.294555
2
           4.287345
3
           4.279235
```

title \

movieId

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Tops 5 Recommendations for User 603:
   movieId
                                                        title \
0
     8477
                                             Jetée, La (1962)
     3266 Man Bites Dog (C'est arrivé près de chez vous)...
1
2
     25771 Andalusian Dog, An (Chien andalou, Un) (1929)
3
     3030
                                               Yojimbo (1961)
      2138
4
                                        Watership Down (1978)
                                       genres predicted rating
0
                               Romance|Sci-Fi
                                                      4.466864
1
                  Comedy|Crime|Drama|Thriller
                                                       4.416031
2
                                      Fantasy
                                                      4.353677
3
                             Action | Adventure
                                                      4.331477
  Adventure | Animation | Children | Drama | Fantasy
                                                       4.318364
Tops 5 Recommendations for User 604:
   movieId
                                                       title
                                                                    genres \
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
                                                              Drama|War
1
     1217
                                                  Ran (1985)
2
                         Guess Who's Coming to Dinner (1967)
      3451
                                                                    Drama
3
      2360
                            Celebration, The (Festen) (1998)
                                                                    Drama
     6460
                              Trial, The (Procès, Le) (1962)
                                                                    Drama
   predicted_rating
0
           4.579865
1
           4.495245
2
           4.487331
3
           4.485196
           4.474023
Tops 5 Recommendations for User 605:
  movieId
                                                         title \
   177593 Three Billboards Outside Ebbing, Missouri (2017)
    106642
                                Day of the Doctor, The (2013)
1
2
     7008 Last Tango in Paris (Ultimo tango a Parigi) (1...
                                        Paths of Glory (1957)
3
      1178
                                      Last Detail, The (1973)
      3200
4
                   genres predicted rating
0
             Crime|Drama
                                   4.295524
1
  Adventure | Drama | Sci-Fi
                                   4.224499
2
           Drama|Romance
                                   4.186603
3
                                   4.182658
                Drama|War
4
             Comedy|Drama
                                   4.177248
Tops 5 Recommendations for User 606:
  movieId
                                                       title \
     1178
                                       Paths of Glory (1957)
1
     2202
                                             Lifeboat (1944)
2
     1104
                            Streetcar Named Desire, A (1951)
3
   177593 Three Billboards Outside Ebbing, Missouri (2017)
     1248
4
                                        Touch of Evil (1958)
                     genres predicted rating
0
                  Drama|War
                                     4.574115
                  Drama|War
1
                                     4.554610
2
                      Drama
                                     4.545495
3
                Crime|Drama
                                     4.522581
  Crime|Film-Noir|Thriller
                                     4.459879
Tops 5 Recommendations for User 607:
  movieId
                                       title
                                                                genres \
Ω
     7121
                           Adam's Rib (1949)
                                                      Comedy|Romance
     1041
                       Secrets & Lies (1996)
1
                                                                 Drama
    142488
                            Spotlight (2015)
                                                              Thriller
3
     1104 Streetcar Named Desire, A (1951)
     1284
                       Big Sleep, The (1946) Crime|Film-Noir|Mystery
   predicted rating
```

4

4.275849

4.725365

```
2
           4.646018
3
           4.617356
           4.616803
Tops 5 Recommendations for User 608:
   movieId
                                                          title
                                                                       genres
      6460
0
                                Trial, The (Procès, Le) (1962)
                                                                        Drama
      3200
1
                                       Last Detail, The (1973) Comedy|Drama
2
      2360
                              Celebration, The (Festen) (1998)
                                                                        Drama
3
           Three Billboards Outside Ebbing, Missouri (2017) Crime | Drama
   177593
      2239 Swept Away (Travolti da un insolito destino ne... Comedy|Drama
   predicted rating
           4.264393
1
           4.184646
2
           4.182265
3
           4.169155
           4.168546
Tops 5 Recommendations for User 609:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
3
      2202
                                               Lifeboat (1944)
                                                                  Drama|War
4
      6460
                               Trial, The (Procès, Le) (1962)
                                                                      Drama
   predicted rating
0
           4.297921
1
           4.244251
2
           4.204559
3
           4.199820
           4.179265
Tops 5 Recommendations for User 610:
   movieId
                                                          title \
      1217
0
                                                     Ran (1985)
           Neon Genesis Evangelion: The End of Evangelion...
1
     27156
2
      2202
                                               Lifeboat (1944)
3
      1178
                                         Paths of Glory (1957)
      1104
                              Streetcar Named Desire, A (1951)
                                   genres predicted_rating
0
                                Drama|War
                                                   4.606156
1
  Action|Animation|Drama|Fantasy|Sci-Fi
                                                    4.601495
2
                                                    4.549317
                                Drama|War
3
                                Drama|War
                                                    4.518942
4
                                    Drama
                                                    4.507667
Tops 5 Recommendations for User 611:
   movieId
                                                         title
                                                                     genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
           4.379018
3
           4.355628
Tops 5 Recommendations for User 612:
   movieId
                                                         title
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
```

4.647230

```
predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 613:
   movieId
                                                         title
                                                                     genres
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 614:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 615:
   movieId
                                                         title
                                                                     genres
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 616:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
Λ
                                                               Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 617:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
```

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2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 618:
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 619:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 620:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                      Drama
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 621:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
```

Tops 5 Recommendations for User 622:

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movieId
                                                         title
                                                                      genres
0
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 623:
   movieId
                                                         title
                                                                     genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 624:
   movieId
                                                         title
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                    Ran (1985)
      1217
4
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 625:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                                      Drama
      1104
                             Streetcar Named Desire, A (1951)
1
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 626:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                                  Drama|War
                                                    Ran (1985)
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
```

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Tops 5 Recommendations for User 627:
   movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
      1104
1
                                                                     Drama
                                              Lifeboat (1944)
2
      2202
                                                                 Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 628:
   movieId
                                                        title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
                                                   Ran (1985)
      1217
                                                                 Drama|War
   predicted_rating
           4.410532
0
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 629:
  movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
      2202
2
                                              Lifeboat (1944)
                                                                 Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
                                                   Ran (1985)
4
      1217
                                                                 Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 630:
   movieId
                                                        title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1104
                            Streetcar Named Desire, A (1951)
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                DramalWar
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 631:
  movieId
                                                        title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
     1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
```

4.355628

```
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 632:
   movieId
                                                         title
                                                                     genres \
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 633:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
                                                                  Drama|War
2
      2202
                                               Lifeboat (1944)
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 634:
   movieId
                                                         title
                                                                      genres
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 635:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
           4.379018
3
           4.355628
Tops 5 Recommendations for User 636:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                               Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
```

```
predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 637:
   movieId
                                                         title
                                                                     genres
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 638:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 639:
   movieId
                                                         title
                                                                     genres
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 640:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
Λ
                                                               Crime|Drama
1
                             Streetcar Named Desire, A (1951)
      1104
                                                                      Drama
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 641:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
```

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2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 642:
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 643:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 644:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                      Drama
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
4
Tops 5 Recommendations for User 645:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
```

Tops 5 Recommendations for User 646:

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movieId
                                                         title
                                                                      genres
    177593
0
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                               Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 647:
   movieId
                                                         title
                                                                     genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
      1178
3
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 648:
   movieId
                                                         title
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
      2202
2
                                               Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                    Ran (1985)
      1217
4
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 649:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                                      Drama
      1104
                             Streetcar Named Desire, A (1951)
1
2
      2202
                                               Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 650:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                               Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                                  Drama|War
                                                    Ran (1985)
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
```

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Tops 5 Recommendations for User 651:
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
      1104
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 652:
   movieId
                                                        title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 653:
  movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                   Ran (1985)
4
      1217
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 654:
   movieId
                                                        title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1104
                            Streetcar Named Desire, A (1951)
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 655:
  movieId
                                                        title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                  Drama|War
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
```

4.355628

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2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 656:
   movieId
                                                         title
                                                                     genres \
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 657:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
                                                                  Drama|War
2
      2202
                                               Lifeboat (1944)
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 658:
   movieId
                                                         title
                                                                      genres
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 659:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
           4.379018
3
           4.355628
Tops 5 Recommendations for User 660:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                               Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
```

```
predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 661:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 662:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
4
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 663:
   movieId
                                                         title
                                                                     genres
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 664:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
Λ
1
                             Streetcar Named Desire, A (1951)
      1104
                                                                      Drama
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 665:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
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2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 666:
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 667:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 668:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                      Drama
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 669:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
```

Tops 5 Recommendations for User 670:

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movieId
                                                         title
                                                                      genres
0
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 671:
   movieId
                                                         title
                                                                     genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
      1178
3
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 672:
   movieId
                                                         title
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                    Ran (1985)
      1217
4
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 673:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                                      Drama
      1104
                             Streetcar Named Desire, A (1951)
1
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 674:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                                  Drama|War
                                                    Ran (1985)
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
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Tops 5 Recommendations for User 675:
   movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
      1104
1
                                                                     Drama
                                              Lifeboat (1944)
2
      2202
                                                                 Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 676:
   movieId
                                                        title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 677:
  movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
      2202
2
                                              Lifeboat (1944)
                                                                 Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
                                                   Ran (1985)
4
      1217
                                                                 Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 678:
   movieId
                                                        title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1104
                            Streetcar Named Desire, A (1951)
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                DramalWar
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 679:
  movieId
                                                        title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
     1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
```

4.355628

```
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 680:
   movieId
                                                         title
                                                                     genres \
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 681:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
                                                                  Drama|War
2
      2202
                                              Lifeboat (1944)
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 682:
   movieId
                                                         title
                                                                      genres
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 683:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
           4.379018
3
           4.355628
Tops 5 Recommendations for User 684:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
```

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predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 685:
  movieId
                                                         title
                                                                     genres
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 686:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
4
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 687:
   movieId
                                                         title
                                                                     genres
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 688:
  movieId
                                                                     genres
                                                         title
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
Λ
1
                             Streetcar Named Desire, A (1951)
      1104
                                                                      Drama
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 689:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
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2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 690:
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
     1104
                                              Lifeboat (1944)
                                                                  Drama|War
2
      2202
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
     1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 691:
  movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 692:
   movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
4
Tops 5 Recommendations for User 693:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
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Tops 5 Recommendations for User 694:

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movieId
                                                         title
                                                                      genres
    177593
0
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
0
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 695:
   movieId
                                                         title
                                                                     genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
      1178
3
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 696:
   movieId
                                                         title
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                    Ran (1985)
      1217
4
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 697:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                                      Drama
      1104
                             Streetcar Named Desire, A (1951)
1
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 698:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                                  Drama|War
                                                    Ran (1985)
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
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Tops 5 Recommendations for User 699:
   movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
      1104
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 700:
   movieId
                                                        title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                   Ran (1985)
      1217
                                                                  Drama|War
   predicted_rating
           4.410532
0
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 701:
  movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                   Ran (1985)
4
      1217
                                                                 Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 702:
   movieId
                                                        title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1104
                            Streetcar Named Desire, A (1951)
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                DramalWar
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 703:
  movieId
                                                        title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                  Drama|War
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
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4.355628

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2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 704:
   movieId
                                                         title
                                                                     genres \
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 705:
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                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
                                                                  Drama|War
2
      2202
                                              Lifeboat (1944)
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 706:
   movieId
                                                         title
                                                                      genres
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 707:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
           4.379018
3
           4.355628
Tops 5 Recommendations for User 708:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
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predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 709:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 710:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
4
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 711:
   movieId
                                                         title
                                                                     genres
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 712:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
Λ
1
                             Streetcar Named Desire, A (1951)
      1104
                                                                      Drama
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 713:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
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2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                         Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 714:
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 715:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                         Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 716:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                      Drama
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 717:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
```

Tops 5 Recommendations for User 718:

```
movieId
                                                         title
                                                                      genres
0
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 719:
   movieId
                                                         title
                                                                     genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 720:
   movieId
                                                         title
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                    Ran (1985)
      1217
4
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 721:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                                      Drama
      1104
                             Streetcar Named Desire, A (1951)
1
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 722:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                                  Drama|War
                                                    Ran (1985)
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
```

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Tops 5 Recommendations for User 723:
   movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
      1104
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 724:
   movieId
                                                        title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                   Ran (1985)
      1217
                                                                  Drama|War
   predicted_rating
           4.410532
0
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 725:
  movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                   Ran (1985)
4
      1217
                                                                 Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 726:
   movieId
                                                        title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1104
                            Streetcar Named Desire, A (1951)
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                DramalWar
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 727:
  movieId
                                                        title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                  Drama|War
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
```

4.355628

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2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 728:
   movieId
                                                         title
                                                                     genres \
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 729:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
                                                                   Drama|War
2
      2202
                                               Lifeboat (1944)
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 730:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 731:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
           4.379018
3
           4.355628
Tops 5 Recommendations for User 732:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                   Drama|War
```

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predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 733:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
      1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 734:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
4
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 735:
   movieId
                                                         title
                                                                     genres
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 736:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
Λ
                                                               Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 737:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
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2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 738:
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
     1104
                                              Lifeboat (1944)
                                                                  Drama|War
2
      2202
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
     1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 739:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 740:
   movieId
                                                         title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
4
Tops 5 Recommendations for User 741:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
```

Tops 5 Recommendations for User 742:

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movieId
                                                         title
                                                                      genres
0
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 743:
   movieId
                                                         title
                                                                     genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
      1178
3
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 744:
   movieId
                                                         title
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                    Ran (1985)
      1217
4
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 745:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                                      Drama
      1104
                             Streetcar Named Desire, A (1951)
1
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 746:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                                  Drama|War
                                                    Ran (1985)
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
```

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Tops 5 Recommendations for User 747:
   movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
      1104
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 748:
   movieId
                                                        title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 749:
  movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                   Ran (1985)
4
      1217
                                                                 Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 750:
   movieId
                                                        title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1104
                            Streetcar Named Desire, A (1951)
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                DramalWar
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 751:
  movieId
                                                        title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                  Drama|War
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
```

4.355628

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2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 752:
   movieId
                                                         title
                                                                     genres \
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 753:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
                                                                  Drama|War
2
      2202
                                              Lifeboat (1944)
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 754:
   movieId
                                                         title
                                                                      genres
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 755:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
           4.379018
3
           4.355628
Tops 5 Recommendations for User 756:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
```

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predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 757:
   movieId
                                                         title
                                                                     genres
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 758:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
     1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 759:
   movieId
                                                         title
                                                                     genres
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 760:
  movieId
                                                                     genres
                                                         title
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
Λ
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 761:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
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2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 762:
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
     1104
                                              Lifeboat (1944)
                                                                  Drama|War
2
      2202
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
     1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 763:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 764:
   movieId
                                                         title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
4
Tops 5 Recommendations for User 765:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
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Tops 5 Recommendations for User 766:

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movieId
                                                         title
                                                                      genres
0
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 767:
   movieId
                                                         title
                                                                     genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
      1178
3
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 768:
   movieId
                                                         title
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                    Ran (1985)
      1217
4
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 769:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                                      Drama
      1104
                             Streetcar Named Desire, A (1951)
1
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 770:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                                  Drama|War
                                                    Ran (1985)
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
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Tops 5 Recommendations for User 771:
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
      1104
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                 DramalWar
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 772:
   movieId
                                                        title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 773:
  movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                   Ran (1985)
4
      1217
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 774:
   movieId
                                                        title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1104
                            Streetcar Named Desire, A (1951)
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                DramalWar
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 775:
  movieId
                                                        title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                  Drama|War
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
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4.355628

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2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 776:
   movieId
                                                         title
                                                                     genres \
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 777:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
                                                                   Drama|War
2
      2202
                                               Lifeboat (1944)
3
      1178
                                         Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 778:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 779:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
           4.379018
3
           4.355628
Tops 5 Recommendations for User 780:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                         Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                   Drama|War
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predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 781:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 782:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
4
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 783:
   movieId
                                                         title
                                                                     genres
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 784:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
Λ
1
                             Streetcar Named Desire, A (1951)
      1104
                                                                      Drama
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 785:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
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2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 786:
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 787:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 788:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                      Drama
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 789:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
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Tops 5 Recommendations for User 790:

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movieId
                                                         title
                                                                      genres
0
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 791:
   movieId
                                                         title
                                                                     genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
      1178
3
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 792:
   movieId
                                                         title
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                    Ran (1985)
      1217
4
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 793:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                                      Drama
      1104
                             Streetcar Named Desire, A (1951)
1
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 794:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                                  Drama|War
                                                    Ran (1985)
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
```

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Tops 5 Recommendations for User 795:
   movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
      1104
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 796:
   movieId
                                                        title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                   Ran (1985)
      1217
                                                                  Drama|War
   predicted_rating
           4.410532
0
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 797:
  movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                   Ran (1985)
4
      1217
                                                                 Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 798:
   movieId
                                                        title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1104
                            Streetcar Named Desire, A (1951)
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                DramalWar
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 799:
  movieId
                                                        title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                  Drama|War
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
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4.355628

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2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 800:
   movieId
                                                         title
                                                                     genres \
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 801:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
                                                                  Drama|War
2
      2202
                                              Lifeboat (1944)
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 802:
   movieId
                                                         title
                                                                      genres
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 803:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
           4.379018
3
           4.355628
Tops 5 Recommendations for User 804:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
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predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 805:
  movieId
                                                         title
                                                                     genres
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 806:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
4
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 807:
   movieId
                                                         title
                                                                     genres
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 808:
  movieId
                                                                     genres
                                                         title
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
Λ
1
                             Streetcar Named Desire, A (1951)
      1104
                                                                      Drama
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 809:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
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2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 810:
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
     1104
                                              Lifeboat (1944)
                                                                  Drama|War
2
      2202
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
     1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 811:
  movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 812:
   movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
4
Tops 5 Recommendations for User 813:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
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Tops 5 Recommendations for User 814:

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movieId
                                                         title
                                                                      genres
0
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 815:
   movieId
                                                         title
                                                                     genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
      1178
3
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 816:
   movieId
                                                         title
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
                                        Paths of Glory (1957)
      1178
                                                                  Drama|War
                                                    Ran (1985)
      1217
4
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 817:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                                      Drama
      1104
                             Streetcar Named Desire, A (1951)
1
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 818:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                                  Drama|War
                                                    Ran (1985)
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
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Tops 5 Recommendations for User 819:
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
      1104
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 820:
   movieId
                                                        title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 821:
  movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                   Ran (1985)
4
      1217
                                                                 Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 822:
   movieId
                                                        title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1104
                            Streetcar Named Desire, A (1951)
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                DramalWar
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 823:
  movieId
                                                        title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                  Drama|War
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
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4.355628

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2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 824:
   movieId
                                                         title
                                                                     genres \
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 825:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
                                                                  Drama|War
2
      2202
                                              Lifeboat (1944)
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 826:
   movieId
                                                         title
                                                                      genres
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 827:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
           4.379018
3
           4.355628
Tops 5 Recommendations for User 828:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
```

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predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 829:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
      1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 830:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 831:
   movieId
                                                         title
                                                                     genres
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 832:
   movieId
                                                                     genres
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
Λ
1
                             Streetcar Named Desire, A (1951)
      1104
                                                                       Drama
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 833:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
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2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 834:
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 835:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 836:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                      Drama
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 837:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
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Tops 5 Recommendations for User 838:

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movieId
                                                         title
                                                                      genres
0
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 839:
   movieId
                                                         title
                                                                     genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
      1178
3
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 840:
   movieId
                                                         title
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                    Ran (1985)
      1217
4
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 841:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                                      Drama
      1104
                             Streetcar Named Desire, A (1951)
1
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 842:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                                  Drama|War
                                                    Ran (1985)
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
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Tops 5 Recommendations for User 843:
   movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
      1104
1
                                                                     Drama
                                              Lifeboat (1944)
2
      2202
                                                                 Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 844:
   movieId
                                                        title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
                                                   Ran (1985)
      1217
                                                                 Drama|War
   predicted_rating
           4.410532
0
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 845:
  movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
      2202
2
                                              Lifeboat (1944)
                                                                 Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
                                                   Ran (1985)
4
      1217
                                                                 Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 846:
   movieId
                                                        title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1104
                            Streetcar Named Desire, A (1951)
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                DramalWar
     1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 847:
  movieId
                                                        title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
     1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
```

4.355628

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2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 848:
   movieId
                                                         title
                                                                     genres \
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 849:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
                                                                  Drama|War
2
      2202
                                              Lifeboat (1944)
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 850:
   movieId
                                                         title
                                                                      genres
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 851:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
           4.379018
3
           4.355628
Tops 5 Recommendations for User 852:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
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predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 853:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
      1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 854:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
4
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 855:
   movieId
                                                         title
                                                                     genres
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 856:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
Λ
                                                               Crime|Drama
1
                             Streetcar Named Desire, A (1951)
      1104
                                                                      Drama
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 857:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
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2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 858:
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
     1104
                                              Lifeboat (1944)
                                                                  Drama|War
2
      2202
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
     1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 859:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 860:
   movieId
                                                         title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
4
Tops 5 Recommendations for User 861:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
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Tops 5 Recommendations for User 862:

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movieId
                                                         title
                                                                      genres
    177593
0
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
0
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 863:
   movieId
                                                         title
                                                                     genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
      1178
3
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 864:
   movieId
                                                         title
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                    Ran (1985)
      1217
4
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 865:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                                      Drama
      1104
                             Streetcar Named Desire, A (1951)
1
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 866:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                                  Drama|War
                                                    Ran (1985)
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
```

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Tops 5 Recommendations for User 867:
   movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
      1104
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 868:
   movieId
                                                        title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 869:
  movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                   Ran (1985)
4
      1217
                                                                 Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 870:
   movieId
                                                        title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1104
                            Streetcar Named Desire, A (1951)
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                DramalWar
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 871:
  movieId
                                                        title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                  Drama|War
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
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4.355628

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2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 872:
   movieId
                                                         title
                                                                     genres \
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 873:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
                                                                  Drama|War
2
      2202
                                              Lifeboat (1944)
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 874:
   movieId
                                                         title
                                                                      genres
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 875:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
           4.379018
3
           4.355628
Tops 5 Recommendations for User 876:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
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predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 877:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 878:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
4
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 879:
   movieId
                                                         title
                                                                     genres
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 880:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
Λ
1
                             Streetcar Named Desire, A (1951)
      1104
                                                                      Drama
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 881:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
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2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 882:
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 883:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 884:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                      Drama
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 885:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
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Tops 5 Recommendations for User 886:

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movieId
                                                         title
                                                                      genres
    177593
0
            Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                               Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 887:
   movieId
                                                         title
                                                                     genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 888:
   movieId
                                                         title
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
      2202
2
                                               Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                    Ran (1985)
      1217
4
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 889:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                                      Drama
      1104
                             Streetcar Named Desire, A (1951)
1
2
      2202
                                               Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 890:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                               Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                                  Drama|War
                                                    Ran (1985)
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
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Tops 5 Recommendations for User 891:
   movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
      1104
1
                                                                     Drama
                                              Lifeboat (1944)
2
      2202
                                                                 Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 892:
   movieId
                                                        title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
                                                   Ran (1985)
      1217
                                                                 Drama|War
   predicted_rating
           4.410532
0
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 893:
  movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
      2202
2
                                              Lifeboat (1944)
                                                                 Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
                                                   Ran (1985)
4
      1217
                                                                 Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 894:
   movieId
                                                        title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1104
                            Streetcar Named Desire, A (1951)
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                DramalWar
     1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 895:
  movieId
                                                        title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
     1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
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4.355628

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2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 896:
   movieId
                                                         title
                                                                     genres \
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 897:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
                                                                  Drama|War
2
      2202
                                              Lifeboat (1944)
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 898:
   movieId
                                                         title
                                                                      genres
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 899:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
           4.379018
3
           4.355628
Tops 5 Recommendations for User 900:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
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predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 901:
  movieId
                                                         title
                                                                     genres
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0
1
     1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 902:
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                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
4
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 903:
   movieId
                                                         title
                                                                     genres
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 904:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
Λ
1
                             Streetcar Named Desire, A (1951)
      1104
                                                                      Drama
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 905:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
```

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2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 906:
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
     1104
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
     1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 907:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 908:
   movieId
                                                         title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
4
Tops 5 Recommendations for User 909:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
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Tops 5 Recommendations for User 910:

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movieId
                                                         title
                                                                      genres
0
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 911:
   movieId
                                                         title
                                                                     genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
      1178
3
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 912:
   movieId
                                                         title
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
                                        Paths of Glory (1957)
      1178
                                                                  Drama|War
                                                    Ran (1985)
      1217
4
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 913:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                                      Drama
      1104
                             Streetcar Named Desire, A (1951)
1
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 914:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                                  Drama|War
                                                    Ran (1985)
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
```

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Tops 5 Recommendations for User 915:
   movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
      1104
1
                                                                     Drama
                                              Lifeboat (1944)
2
      2202
                                                                 Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 916:
   movieId
                                                        title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
                                                   Ran (1985)
      1217
                                                                 Drama|War
   predicted_rating
           4.410532
0
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 917:
  movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
      2202
2
                                              Lifeboat (1944)
                                                                 Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
                                                   Ran (1985)
4
      1217
                                                                 Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 918:
   movieId
                                                        title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1104
                            Streetcar Named Desire, A (1951)
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                DramalWar
     1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 919:
  movieId
                                                        title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
     1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
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4.355628

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2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 920:
   movieId
                                                         title
                                                                     genres \
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 921:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
                                                                  Drama|War
2
      2202
                                              Lifeboat (1944)
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 922:
   movieId
                                                         title
                                                                     genres
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 923:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
           4.379018
3
           4.355628
Tops 5 Recommendations for User 924:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
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predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 925:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
      1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 926:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 927:
   movieId
                                                         title
                                                                     genres
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 928:
   movieId
                                                                     genres
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
Λ
1
                             Streetcar Named Desire, A (1951)
      1104
                                                                      Drama
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 929:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
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2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 930:
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
     1104
                                              Lifeboat (1944)
                                                                  Drama|War
2
      2202
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
     1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 931:
  movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                            Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 932:
   movieId
                                                         title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
4
Tops 5 Recommendations for User 933:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
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Tops 5 Recommendations for User 934:

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movieId
                                                         title
                                                                      genres
0
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 935:
   movieId
                                                         title
                                                                     genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
      1178
3
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 936:
   movieId
                                                         title
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                    Ran (1985)
      1217
4
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 937:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                                      Drama
      1104
                             Streetcar Named Desire, A (1951)
1
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 938:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                                  Drama|War
                                                    Ran (1985)
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
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Tops 5 Recommendations for User 939:
   movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
      1104
1
                                                                     Drama
                                              Lifeboat (1944)
2
      2202
                                                                 Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 940:
   movieId
                                                        title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted_rating
0
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1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 941:
  movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
                                                   Ran (1985)
4
      1217
                                                                 Drama|War
   predicted_rating
0
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1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 942:
   movieId
                                                        title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1104
                            Streetcar Named Desire, A (1951)
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                DramalWar
     1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
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1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 943:
  movieId
                                                        title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
     1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
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4.355628

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2
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3
           4.379018
           4.355628
Tops 5 Recommendations for User 944:
   movieId
                                                         title
                                                                     genres \
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
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1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 945:
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                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
                                                                  Drama|War
2
      2202
                                               Lifeboat (1944)
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
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0
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1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 946:
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                                                         title
                                                                      genres
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
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0
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1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 947:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
           4.379018
3
           4.355628
Tops 5 Recommendations for User 948:
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                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                               Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
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predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 949:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
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           4.399047
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           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 950:
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                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
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                                                   Ran (1985)
                                                                  Drama|War
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           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 951:
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                                                         title
                                                                     genres
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
0
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1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 952:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
Λ
1
                             Streetcar Named Desire, A (1951)
      1104
                                                                      Drama
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
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0
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2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 953:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
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2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
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1
           4.399047
2
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3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 954:
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 955:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
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0
           4.399047
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2
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3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 956:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                      Drama
                                              Lifeboat (1944)
2
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
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           4.388618
3
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           4.355628
Tops 5 Recommendations for User 957:
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                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
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   predicted_rating
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           4.399047
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           4.388618
3
           4.379018
4
           4.355628
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Tops 5 Recommendations for User 958:

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movieId
                                                         title
                                                                      genres
0
    177593
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
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           4.399047
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           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 959:
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                                                         title
                                                                     genres
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    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
      1178
3
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
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1
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2
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3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 960:
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                             Streetcar Named Desire, A (1951)
1
      1104
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
                                        Paths of Glory (1957)
      1178
                                                                  Drama|War
                                                    Ran (1985)
      1217
4
                                                                  Drama|War
   predicted rating
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1
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2
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3
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           4.355628
Tops 5 Recommendations for User 961:
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                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                                      Drama
      1104
                             Streetcar Named Desire, A (1951)
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      2202
                                              Lifeboat (1944)
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3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
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   predicted rating
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           4.379018
           4.355628
Tops 5 Recommendations for User 962:
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                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                                  Drama|War
                                                    Ran (1985)
   predicted rating
0
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1
           4.399047
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           4.388618
3
           4.379018
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Tops 5 Recommendations for User 963:
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                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
      1104
1
                                                                     Drama
                                              Lifeboat (1944)
2
      2202
                                                                 Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
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           4.399047
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           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 964:
   movieId
                                                        title
                                                                     genres
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0
1
     1104
                            Streetcar Named Desire, A (1951)
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
      1217
                                                   Ran (1985)
                                                                 Drama|War
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           4.399047
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           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 965:
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                                                        title
                                                                    genres
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      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
                                                   Ran (1985)
4
      1217
                                                                 Drama|War
   predicted_rating
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           4.399047
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           4.388618
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           4.379018
           4.355628
Tops 5 Recommendations for User 966:
   movieId
                                                        title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1104
                            Streetcar Named Desire, A (1951)
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                DramalWar
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
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           4.355628
Tops 5 Recommendations for User 967:
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                                                        title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
     1217
                                                   Ran (1985)
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   predicted rating
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4.410532

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3
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           4.355628
Tops 5 Recommendations for User 968:
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0
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
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3
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           4.355628
Tops 5 Recommendations for User 969:
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                                                         title
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                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
                                                                  Drama|War
2
      2202
                                               Lifeboat (1944)
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
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      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
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           4.399047
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           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 970:
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                                                         title
                                                                      genres
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0
                                                                Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
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      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
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2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 971:
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                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
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2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                   Drama|War
4
      1217
                                                    Ran (1985)
                                                                   Drama|War
   predicted_rating
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           4.399047
2
           4.388618
           4.379018
3
           4.355628
Tops 5 Recommendations for User 972:
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                                                         title
                                                                      genres
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1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
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predicted rating
0
           4.410532
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           4.399047
2
           4.388618
3
           4.379018
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           4.355628
Tops 5 Recommendations for User 973:
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                                                         title
                                                                     genres
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0
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      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
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           4.399047
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           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 974:
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                                                         title
                                                                      genres \
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                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
4
                                                    Ran (1985)
                                                                  Drama|War
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1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 975:
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                                                         title
                                                                     genres
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           Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
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1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 976:
   movieId
                                                                      genres
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
Λ
1
                             Streetcar Named Desire, A (1951)
      1104
                                                                       Drama
2
                                               Lifeboat (1944)
      2202
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
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           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 977:
   movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
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2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 978:
                                                         title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
     1104
                                              Lifeboat (1944)
                                                                  Drama|War
2
      2202
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
     1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 979:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                 Drama|War
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 980:
   movieId
                                                         title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
4
Tops 5 Recommendations for User 981:
  movieId
                                                         title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
```

Tops 5 Recommendations for User 982:

```
movieId
                                                         title
                                                                      genres
    177593
0
           Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 983:
   movieId
                                                         title
                                                                     genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                               Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
      1178
3
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 984:
   movieId
                                                         title
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
                                        Paths of Glory (1957)
      1178
                                                                  Drama|War
                                                    Ran (1985)
      1217
4
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 985:
   movieId
                                                         title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                                                                      Drama
      1104
                             Streetcar Named Desire, A (1951)
1
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 986:
   movieId
                                                         title
                                                                      genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                                  Drama|War
                                                    Ran (1985)
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
```

3

4.379018

```
Tops 5 Recommendations for User 987:
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
                            Streetcar Named Desire, A (1951)
      1104
1
                                                                     Drama
2
      2202
                                              Lifeboat (1944)
                                                                 Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                 Drama|War
4
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 988:
   movieId
                                                        title
                                                                     genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
1
     1104
                            Streetcar Named Desire, A (1951)
2
                                              Lifeboat (1944)
      2202
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted_rating
           4.410532
0
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 989:
   movieId
                                                        title
                                                                    genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                     Drama
      2202
2
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
                                                   Ran (1985)
4
      1217
                                                                 Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 990:
   movieId
                                                        title
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1104
                            Streetcar Named Desire, A (1951)
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                DramalWar
      1217
                                                   Ran (1985)
                                                                 Drama|War
   predicted rating
0
           4.410532
           4.399047
1
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 991:
  movieId
                                                        title
                                                                     genres \
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
     1178
                                        Paths of Glory (1957)
                                                                  Drama|War
     1217
                                                   Ran (1985)
                                                                  Drama|War
   predicted rating
```

4

4.355628

4.410532

```
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 992:
   movieId
                                                         title
                                                                     genres \
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 993:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017)
                                                                Crime|Drama
                             Streetcar Named Desire, A (1951)
1
      1104
                                                                       Drama
                                                                  Drama|War
2
      2202
                                              Lifeboat (1944)
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 994:
   movieId
                                                         title
                                                                      genres
   177593 Three Billboards Outside Ebbing, Missouri (2017)
0
                                                                Crime|Drama
      1104
                            Streetcar Named Desire, A (1951)
1
                                                                      Drama
2
      2202
                                              Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted_rating
0
           4.410532
1
           4.399047
2
           4.388618
3
           4.379018
           4.355628
Tops 5 Recommendations for User 995:
   movieId
                                                         title
                                                                      genres
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
      1104
                             Streetcar Named Desire, A (1951)
1
                                                                       Drama
2
      2202
                                               Lifeboat (1944)
                                                                   Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
   predicted rating
0
           4.410532
1
           4.399047
2
           4.388618
           4.379018
3
           4.355628
Tops 5 Recommendations for User 996:
   movieId
                                                         title
                                                                      genres
0
    177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
      1104
                             Streetcar Named Desire, A (1951)
2
      2202
                                              Lifeboat (1944)
                                                                  Drama|War
3
      1178
                                        Paths of Glory (1957)
                                                                  Drama|War
4
      1217
                                                    Ran (1985)
                                                                  Drama|War
```

4.399047

1

```
predicted rating
0
          4.410532
1
           4.399047
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 997:
  movieId
                                                      title
                                                                 genres
0
  177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1104
                           Streetcar Named Desire, A (1951)
                                                                   Drama
2
     2202
                                            Lifeboat (1944)
                                                              Drama|War
3
     1178
                                      Paths of Glory (1957)
                                                              Drama|War
     1217
                                                 Ran (1985) Drama|War
  predicted rating
0
          4.410532
           4.399047
1
2
           4.388618
3
           4.379018
4
           4.355628
Tops 5 Recommendations for User 998:
                                                                  genres \
  movieId
                                                      title
0
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
1
     1104
                           Streetcar Named Desire, A (1951)
                                                                   Drama
2
     2202
                                            Lifeboat (1944)
                                                              Drama|War
3
     1178
                                      Paths of Glory (1957)
                                                              Drama|War
4
     1217
                                                 Ran (1985)
                                                              Drama|War
  predicted rating
0
          4.410532
1
          4.399047
2
          4.388618
3
           4.379018
           4.355628
4
Tops 5 Recommendations for User 999:
  movieId
                                                      title
                                                                  genres
   177593 Three Billboards Outside Ebbing, Missouri (2017) Crime|Drama
0
                           Streetcar Named Desire, A (1951)
1
     1104
                                                                  Drama
2
      2202
                                            Lifeboat (1944)
                                                              Drama|War
3
     1178
                                      Paths of Glory (1957)
                                                             Drama|War
4
     1217
                                                 Ran (1985)
                                                               Drama|War
  predicted_rating
0
          4.410532
1
           4.399047
2
          4.388618
3
          4.379018
           4.355628
```

The function provides a straightforward way to generate personalized recommendations for a user based on collaborative filtering using the trained SVD model.

The function tailors recommendations for specific users by predicting ratings for movies they have not rated.

Although this provides recommendations for active users. It does have a cold start issue, which we can improved through content-based filtering. Let's import TfidVectorizer, and cosine\_similarity libraries from sklearn.featute\_extraction.text and sklean.metrics.pairwise, respectively.

```
In [43]:
```

```
#fill the missing values in movie_df with empty strings
movies_df['genre'] = movies_df['genres'].fillna('')

#Instatiate TfidVectorize, setting stop words to english
tfidf = TfidfVectorizer(stop_words='english')
#fit tfid
```

```
tfidf_matrix = tfidf.fit_transform(movies_df['genres'])
#get the cosine similarity of the matrix
content similarity = cosine similarity(tfidf matrix, tfidf matrix)
#create a DF of the results
content sim df = pd.DataFrame(content similarity, index=movies df['movieId'], columns=mov
ies df['movieId'])
# Create a function that returns similar movies to the one that have been rated
def get similar movies(movie id, top n=5):
    similar movies = content sim df[movie id].sort values(ascending=False).head(top n + movies)
   similar movies = similar movies.iloc[1:] # Exclude the movie itself
    return movies df[movies df['movieId'].isin(similar movies.index)][['movieId', 'title
', 'genres']]
# Example usage
similar movies = get similar movies (100, top n=5)
# print(similar movies)
similar movies
```

### Out[43]:

	movield	title	genres	
2010	2676	Instinct (1999)	DramalThriller	
3160	4251	<b>Chopper (2000)</b>	DramalThriller	
7722	90439	Margin Call (2011)	DramalThriller	
9108	144714	The Perfect Guy (2015)	DramalThriller	
9345	160954	Nerve (2016)	DramalThriller	

Next, we will combine collaborative and content-based models using a weighted hybrid approach.

```
In [44]:
```

```
def hybrid recommend (user id, model, movies df, ratings df, top n=5, weight cf=0.7, weig
ht cb=0.3):
    Generate hybrid recommendations by combining collaborative filtering
    and content-based filtering.
    Parameters:
       user id (int): User ID for whom recommendations are generated.
       model (Surprise SVD): Trained collaborative filtering model.
       movies_df (pd.DataFrame): Movies DataFrame with metadata.
        ratings df (pd.DataFrame): Ratings DataFrame.
        top n (int): Number of recommendations to return.
        weight cf (float): Weight for collaborative filtering.
        weight cb (float): Weight for content-based filtering.
    Returns:
       pd.DataFrame: Top N hybrid recommendations.
    # Step 1: Collaborative Filtering Predictions
    #get the unique movie IDs from the movie df
    all movie ids = movies df['movieId'].unique()
    #get the movieId based on the userId from the ratings df
    rated movies = ratings df[ratings df['userId'] == user id]['movieId'].values
    #create a list of movies for all movies
    unrated movies = [movie for movie in all movie ids if movie not in rated movies]
    # Createa collaborative filtering list for predictions
    cf predictions = []
    #loop through unrated movies
    for movie id in unrated movies:
        #making predictions on the model
       pred = model.predict(user id, movie id).est
```

```
#appending the results to cf_predicitons
        cf predictions.append((movie_id, pred))
    #create a DataFrame fromt he results, making movie ID and rating as columns
    cf df = pd.DataFrame(cf predictions, columns=['movieId', 'cf rating'])
    # Step 2: Content-Based Predictions (Average of Similar Movies)
    #create a list for content-based filtering results
    cb predictions = []
    #loop through the unrated mobvies
    for movie id in unrated movies:
        #Sort the top 5 movies
        similar movies = content sim df[movie id].sort values(ascending=False).head(5 +
1).iloc[1:]
        #get the average movie rating
        avg sim rating = ratings df[ratings df['movieId'].isin(similar movies.index)]['r
ating'].mean()
        #append the results
        cb predictions.append((movie id, avg sim rating))
    #create a DataFrame from the resutls
    cb df = pd.DataFrame(cb predictions, columns=['movieId', 'cb rating'])
    # Step 3: Combine Collaborative and Content-Based Ratings
    combined df = cf_df.merge(cb_df, on='movieId', how='inner')
    combined df['hybrid_rating'] = (
        weight cf * combined df['cf rating'] + weight cb * combined df['cb rating']
    # Step 4: Get Top N Hybrid Recommendations
    top hybrid = combined df.sort values('hybrid rating', ascending=False).head(top n)
    recommendations = top hybrid.merge(movies df, on='movieId', how='inner')
    return recommendations[['movieId', 'title', 'genres', 'hybrid rating']]
# Example usage:
user id = 1
hybrid recommendations = hybrid recommend(user id, model2, movies df, ratings df, top n=
print(hybrid recommendations)
                                                       genres hybrid rating
  movieId
                           title
0
      246
              Hoop Dreams (1994)
                                                  Documentary
                                                                   4.717591
                Notorious (1946) Film-Noir|Romance|Thriller
1
       930
                                                                    4.709753
                      Ran (1985)
2
     1217
                                                    Drama|War
                                                                    4.703947
```

## **Evaluation**

2202

```
In [45]:
```

3

```
def evaluate_model(ratings_df, model):
    """
    Evaluate hybrid recommendation performance using RMSE.
    """
    #using list comprehension, we predict the userId and movieId on the ratings_df
    test_predictions = [
        model.predict(row['userId'], row['movieId']).est for _, row in ratings_df.iterro
ws()
    []
    #Calculat the root mean squared error
    rmse = np.sqrt(mean_squared_error(ratings_df['rating'], test_predictions))
    return rmse

rmse = evaluate_model(ratings_df, model2)
print(f"Hybrid Model RMSE: {rmse}")
```

Drama|War

Drama|War

4.703947

4.703947

Hybrid Model RMSE: 0.6721433404055687

1178 Paths of Glory (1957)

Lifeboat (1944)

Compared to the baseline model prediciton, the hybrid model reduces this error to 13.4% of the range. Representing a 28.7% improvement in prediction accuracy.

This indicates that the hybrid model significantly outperforms the baseline in terms of predictive accuracy.

```
In [46]:
```

```
# Evaluate RMSE for the collaborative filtering model
def evaluate rmse(model, ratings df):
   Calculate RMSE for the collaborative filtering model.
   predictions = []
   actuals = []
    for , row in ratings df.iterrows():
        user_id, movie_id, true_rating = row['userId'], row['movieId'], row['rating']
        pred rating = model.predict(user id, movie id).est
        predictions.append(pred rating)
        actuals.append(true rating)
   rmse = np.sqrt(mean squared error(actuals, predictions))
   return rmse
# Precision@K and Recall@K
def precision recall at k (user id, recommendations, ratings df, k=5):
    Calculate Precision@K and Recall@K.
   # Get movies the user has rated as relevant (e.g., rating >= 4)
   relevant movies = ratings df[(ratings df['userId'] == user id) & (ratings df['rating
'] >= 4)]['movieId'].values
    # Get recommended movies (top-K)
    recommended movies = recommendations['movieId'].head(k).values
    # Calculate Precision@K
   hits = len(set(relevant movies) & set(recommended_movies))
   precision = hits / k
    # Calculate Recall@K
    recall = hits / len(relevant movies) if len(relevant movies) > 0 else 0
   return precision, recall
# Example Usage: Evaluate hybrid recommendations for User 1
user id = 1
recommendations = hybrid recommend(user id, model2, movies df, ratings df, top n=10)
\# precision, recall = precision recall at k (user id, recommendations, ratings df, k=5)
# print(f"Precision@5: {precision}")
# print(f"Recall@5: {recall}")
# Calculate RMSE for the collaborative filtering model
rmse = evaluate rmse(model2, ratings df)
print(f"RMSE: {rmse}")
```

RMSE: 0.6721433404055687

```
In [47]:
```

```
# Example metrics calculation
user_id = 1
k = 5

# Assuming `recommendations`, `model2`, `movies_df`, and `ratings_df` are defined
recommendations = hybrid_recommend(user_id, model2, movies_df, ratings_df, top_n=10)
# precision, recall = precision_recall_at_k(user_id, recommendations, ratings_df, k=k)
rmse = evaluate_rmse(model2, ratings_df)

# Organize metrics into a DataFrame
```

```
metrics_df = pd.DataFrame({
    "Metric": ["RMSE"],
    "Value": [rmse]
})

# Save DataFrame to a CSV file
metrics_df.to_csv("model_evaluation_metrics.csv", index=False)

# Output the DataFrame to verify
print(metrics_df)

Metric Value
0 RMSE 0.672143
```

#### **Real-time recommendations**

Let's test our model, by creating rela-time user input function. If the user is a current user, we will make recommendations based on their previouse rating history. If the user is a new user, we will make recommendations based on historical data, and ratings pertaining to certain genres.

```
In [49]:
```

```
# Real-time input for recommendations
def real time recommendation():
    Generate recommendations based on real-time user input.
   print("Welcome to the Movie Recommendation System!")
   user id = int(input("Enter your User ID (or 0 for a new user): "))
    if user id == 0:
        # For new users, ask for genre preferences
       print("\nIt looks like you're a new user! Please tell us your preferences.")
       genres = input("Enter your favorite genres (comma-separated, e.g., Action, Comed
y): ").split(",")
        genres = [genre.strip() for genre in genres]
        # Filter movies by genres
       filtered movies = movies df[movies df['genres'].apply(lambda x: any(genre in x f
or genre in genres))]
       print("\nBased on your preferences, here are some movie recommendations:")
       print(filtered movies[['title', 'genres']].sample(5))
        # For existing users, use the hybrid recommendation system
       recommendations = hybrid recommend(user id, model2, movies df, ratings df, top n
=5)
       print("\nTop 5 personalized movie recommendations for you:")
       print(recommendations)
# Run real-time recommendation
real time recommendation()
```

```
Welcome to the Movie Recommendation System!
It looks like you're a new user! Please tell us your preferences.
Based on your preferences, here are some movie recommendations:
                                       title
6357
                Nativity Story, The (2006)
1122
                        Lost Highway (1997)
2203
                   Razor's Edge, The (1984)
7361
                               TiMER (2009)
5633 Nine Lives of Tomas Katz, The (2000)
                                               genres
6357
                                                Drama
1122
     Crime | Drama | Fantasy | Film-Noir | Mystery | Romance
2203
7361
                        Comedy | Drama | Fantasy | Romance
5633
                                Comedy | Drama | Fantasy
Enter your favorite genres (comma-separated, e.g., Action, Comedy): Comedy
```

```
Based on your preferences, here are some movie recommendations:
                        title
                                           genres
8332
         Grudge Match (2013)
                                           Comedy
      Shall We Dance? (2004)
5349
                                   Comedy|Romance
5743 Meet the Fockers (2004)
                                           Comedy
6190
       Scary Movie 4 (2006)
                                   Comedy|Horror
           Jackass 2.5 (2007) Comedy|Documentary
7406
```

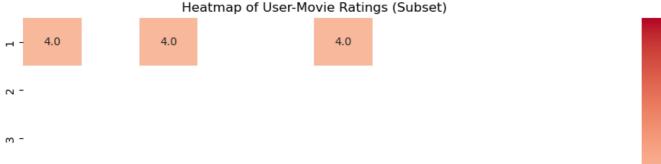
### We can see that the fucntion provide the top personalized recommendations based on that users history.

#### In [50]:

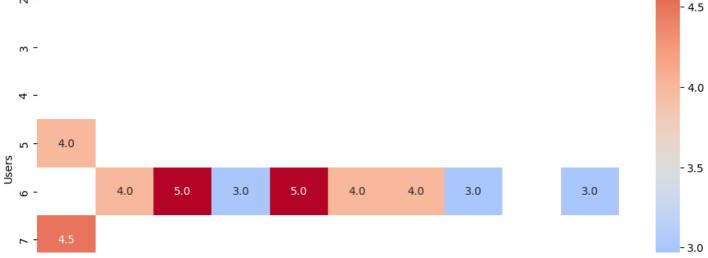
```
# Generate recommendations for a sample user
sample user id = 1
top recommendations = recommend movies(sample user id, model2, movies df, ratings df, top
_n=5)
# Display the recommendations
print("Top 5 Recommendations for User 1:")
print(top recommendations)
import seaborn as sns
import matplotlib.pyplot as plt
user movie matrix = ratings df.pivot(index='userId', columns='movieId', values='rating'
# Create a smaller subset of the user-movie ratings matrix for visualization
user movie subset = user movie matrix.iloc[:10, :10] # Taking the first 10 users and 10
movies
# Plot the heatmap
plt.figure(figsize=(12, 8))
sns.heatmap(user movie subset, annot=True, fmt=".1f", cmap="coolwarm", cbar=True)
plt.title("Heatmap of User-Movie Ratings (Subset)")
plt.xlabel("Movies")
plt.ylabel("Users")
plt.show()
```

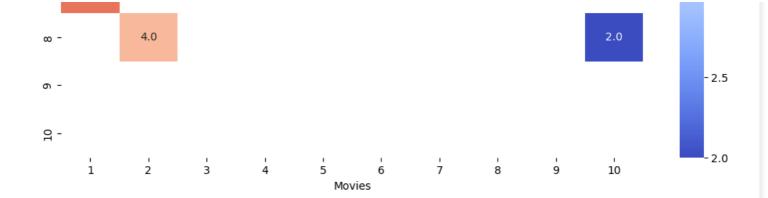
#### Top 5 Recommendations for User 1:

	_				
	movieId		title	genres	<pre>predicted_rating</pre>
0	858	Godfather, The	(1972)	Crime Drama	5
1	1104	Streetcar Named Desire, A	(1951)	Drama	5
2	1178	Paths of Glory	(1957)	Drama War	5
3	1217	Ran	(1985)	Drama War	5
4	2202	Lifeboat	(1944)	Drama War	5



- 5.0





# **Next Steps**

Implement additional evaluation metrics such as **Precision** and **Recall**, although this won't add much value as the matrices itself is sparse. We may want to test for more advanced recommendation models.

Improve diversity and Seredipity, introducing penalization methods for repetitive recommendations to ensure users received diverse movie suggestions.

Implement a feedback loop where users can rate recommendations or mark them as "not interested", allowing continuouse system improvement.

## **Conclusion**

Using collaborative filtering approach implementing leveraging user-based or item-based similarities to recommend top 5 movies for each user. To address the cold start problem, a hybrid model combines collaborative filtering with content-based filtering, incorporating movie metadata.

To provide personalized movie recommendations, we consider their historical data or the historical data of others based on ratings for new users to ensure tailore recommendations.

The model's performance is assessed using Root Mean Squared Error (RMSE) to measure prediction accuracy. Additionally, due to the sparsity within the matrix, Precision and Recall are not used to evaluate the ranking effectiveness of the recommendations.

This project has significant implications for both businesses and consumers:

#### For Businesses:

- Enhances user retention and engagement by improving content discovery.
- Drives higher revenue through increased watch time and targeted content recommendations.
- Provides valuable insights into user preferences for strategic decision-making.

#### For Users:

- Saves time and effort in finding enjoyable movies.
- Improves overall satisfaction with streaming platforms.
- Encourages exploration of new genres and content.