数据观察

```
In [1]: import pandas as pd
```

In [2]: movies_df = pd.read_csv('../data/ml-latest-small/movies.csv')
movies_df.head()

Out[2]:

| genres | title | movield | |
|---|------------------------------------|---------|---|
| Adventure Animation Children Comedy Fantasy | Toy Story (1995) | 1 | 0 |
| Adventure Children Fantasy | Jumanji (1995) | 2 | 1 |
| Comedy Romance | Grumpier Old Men (1995) | 3 | 2 |
| Comedy Drama Romance | Waiting to Exhale (1995) | 4 | 3 |
| Comedy | Father of the Bride Part II (1995) | 5 | 4 |

```
In [3]: links_df = pd.read_csv('../data/ml-latest-small/links.csv')
links_df.head()
```

Out[3]:

| | movield | imdbld | tmdbld |
|---|---------|--------|---------|
| 0 | 1 | 114709 | 862.0 |
| 1 | 2 | 113497 | 8844.0 |
| 2 | 3 | 113228 | 15602.0 |
| 3 | 4 | 114885 | 31357.0 |
| 4 | 5 | 113041 | 11862.0 |

```
In [4]: ratings_df = pd.read_csv('../data/ml-latest-small/ratings.csv')
    ratings_df.head()
```

Out[4]:

| | userld | movield | rating | timestamp |
|---|--------|---------|--------|-----------|
| 0 | 1 | 1 | 4.0 | 964982703 |
| 1 | 1 | 3 | 4.0 | 964981247 |
| 2 | 1 | 6 | 4.0 | 964982224 |
| 3 | 1 | 47 | 5.0 | 964983815 |
| 4 | 1 | 50 | 5.0 | 964982931 |

```
In [5]: tags_df = pd.read_csv('../data/ml-latest-small/tags.csv')
tags_df.head()
```

Out[5]:

| | userld | movield | tag | timestamp |
|---|--------|---------|-----------------|------------|
| 0 | 2 | 60756 | funny | 1445714994 |
| 1 | 2 | 60756 | Highly quotable | 1445714996 |
| 2 | 2 | 60756 | will ferrell | 1445714992 |
| 3 | 2 | 89774 | Boxing story | 1445715207 |
| 4 | 2 | 89774 | MMA | 1445715200 |

数据合并

目的是给定一个用户id,找出用户可能喜欢的电影名。 但是两个文件电影信息和用户评分信息是分开的,所以需要合并。

```
In [6]: data = pd.merge(movies_df, ratings_df, on='movieId') # 通过两数据框之间的movieId连接 data[['userId', 'rating', 'movieId', 'title']].sort_values('userId').to_csv('./output/merged.csv', index=False)
```