

```
In [1]: import numpy as np
import pandas as pd
import warnings
warnings.filterwarnings('ignore')
```

```
In [2]: movies = pd.read_csv('movies.csv')
movies.set_index('Id', inplace = True)
movies.head()
```

```
Out[2]:
```

	Title	Genres
Id		
1	Toy Story (1995)	Adventure Animation Children Comedy Fantasy
2	Jumanji (1995)	Adventure Children Fantasy
3	Grumpier Old Men (1995)	Comedy Romance
4	Waiting to Exhale (1995)	Comedy Drama Romance
5	Father of the Bride Part II (1995)	Comedy

```
In [3]: ratings = pd.read_csv('ratings.csv')
ratings.head()
```

```
Out[3]:
```

	Id	MovieId	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 [4]: movies['rating'] = ratings.groupby('MovieId')['Rating'].mean()
```

```
In [5]: movies.head()
```

```
Out[5]:
```

	Title	Genres	rating
Id			
1	Toy Story (1995)	Adventure Animation Children Comedy Fantasy	3.920930
2	Jumanji (1995)	Adventure Children Fantasy	3.431818
3	Grumpier Old Men (1995)	Comedy Romance	3.259615
4	Waiting to Exhale (1995)	Comedy Drama Romance	2.357143
5	Father of the Bride Part II (1995)	Comedy	3.071429

```
In [6]: movies.info()
```

```
<class 'pandas.core.frame.DataFrame'>
Int64Index: 9742 entries, 1 to 193609
Data columns (total 3 columns):
#   Column  Non-Null Count  Dtype
---  -
0   Title   9742 non-null      object
1   Genres  9742 non-null      object
2   rating  9724 non-null      float64
dtypes: float64(1), object(2)
memory usage: 304.4+ KB
```

```
In [7]: movies['num of rating'] = ratings.groupby('MovieId')['Rating'].count()
movies.head()
```

```
Out[7]:
```

	Title	Genres	rating	num of rating
Id				
1	Toy Story (1995)	Adventure Animation Children Comedy Fantasy	3.920930	215.0
2	Jumanji (1995)	Adventure Children Fantasy	3.431818	110.0
3	Grumpier Old Men (1995)	Comedy Romance	3.259615	52.0
4	Waiting to Exhale (1995)	Comedy Drama Romance	2.357143	7.0
5	Father of the Bride Part II (1995)	Comedy	3.071429	49.0

```
In [15]: comed = movies[movies.Genres.apply(lambda x: "Comedy" in x)]
```

```
In [16]: comed
```

Out[16]:

		Title	Genres	rating	num of rating
Id					
1	Toy Story (1995)	Adventure Animation Children Comedy Fantasy	3.920930	215.0	
3	Grumpier Old Men (1995)	Comedy Romance	3.259615	52.0	
4	Waiting to Exhale (1995)	Comedy Drama Romance	2.357143	7.0	
5	Father of the Bride Part II (1995)	Comedy	3.071429	49.0	
7	Sabrina (1995)	Comedy Romance	3.185185	54.0	
...
193565	Gintama: The Movie (2010)	Action Animation Comedy Sci-Fi	3.500000	1.0	
193571	Silver Spoon (2014)	Comedy Drama	4.000000	1.0	
193581	Black Butler: Book of the Atlantic (2017)	Action Animation Comedy Fantasy	4.000000	1.0	
193583	No Game No Life: Zero (2017)	Animation Comedy Fantasy	3.500000	1.0	
193609	Andrew Dice Clay: Dice Rules (1991)	Comedy	4.000000	1.0	

3756 rows × 4 columns

```
In [20]: comed = comed[comed['num of rating']>100].sort_values("rating",ascending = False)
```

In [22]:

comed

Out[22]:

	Title	Genres	rating	num of rating
Id				
1197	Princess Bride, The (1987)	Action Adventure Comedy Fantasy Romance	4.232394	142.0
296	Pulp Fiction (1994)	Comedy Crime Drama Thriller	4.197068	307.0
4973	Amelie (Fabuleux destin d'Amélie Poulain, Le) ...	Comedy Romance	4.183333	120.0
356	Forrest Gump (1994)	Comedy Drama Romance War	4.164134	329.0
1136	Monty Python and the Holy Grail (1975)	Adventure Comedy Fantasy	4.161765	136.0
608	Fargo (1996)	Comedy Crime Drama Thriller	4.116022	181.0
778	Trainspotting (1996)	Comedy Crime Drama	4.039216	102.0
1270	Back to the Future (1985)	Adventure Comedy Sci-Fi	4.038012	171.0
6377	Finding Nemo (2003)	Adventure Animation Children Comedy	3.960993	141.0
1265	Groundhog Day (1993)	Comedy Fantasy Romance	3.944056	143.0
1732	Big Lebowski, The (1998)	Comedy Crime	3.924528	106.0
1	Toy Story (1995)	Adventure Animation Children Comedy Fantasy	3.920930	215.0
1073	Willy Wonka & the Chocolate Factory (1971)	Children Comedy Fantasy Musical	3.873950	119.0
4886	Monsters, Inc. (2001)	Adventure Animation Children Comedy Fantasy	3.871212	132.0
4306	Shrek (2001)	Adventure Animation Children Comedy Fantasy Ro...	3.867647	170.0
223	Clerks (1994)	Comedy	3.855769	104.0
2918	Ferris Bueller's Day Off (1986)	Comedy	3.839450	109.0
8961	Incredibles, The (2004)	Action Adventure Animation Children Comedy	3.836000	125.0
1682	Truman Show, The (1998)	Comedy Drama Sci-Fi	3.812000	125.0
588	Aladdin (1992)	Adventure Animation Children Comedy Musical	3.792350	183.0
1968	Breakfast Club, The (1985)	Comedy Drama	3.778761	113.0
6539	Pirates of the Caribbean: The Curse of the Bla...	Action Adventure Comedy Fantasy	3.778523	149.0
2716	Ghostbusters (a.k.a. Ghost Busters) (1984)	Action Comedy Sci-Fi	3.775000	120.0
1527	Fifth Element, The (1997)	Action Adventure Comedy Sci-Fi	3.745690	116.0
1923	There's Something About Mary (1998)	Comedy Romance	3.676190	105.0
357	Four Weddings and a Funeral (1994)	Comedy Romance	3.519417	103.0
380	True Lies (1994)	Action Adventure Comedy Romance Thriller	3.497191	178.0
1580	Men in Black (a.k.a. MIB) (1997)	Action Comedy Sci-Fi	3.487879	165.0
597	Pretty Woman (1990)	Comedy Romance	3.485185	135.0
539	Sleepless in Seattle (1993)	Comedy Drama Romance	3.471698	106.0
587	Ghost (1990)	Comedy Drama Fantasy Romance Thriller	3.434783	115.0
500	Mrs. Doubtfire (1993)	Comedy Drama	3.388889	144.0
2706	American Pie (1999)	Comedy Romance	3.378641	103.0
39	Clueless (1995)	Comedy Romance	3.293269	104.0
2683	Austin Powers: The Spy Who Shagged Me (1999)	Action Adventure Comedy	3.198347	121.0
367	Mask, The (1994)	Action Comedy Crime Fantasy	3.184713	157.0
231	Dumb & Dumber (Dumb and Dumber) (1994)	Adventure Comedy	3.060150	133.0
344	Ace Ventura: Pet Detective (1994)	Comedy	3.040373	161.0
586	Home Alone (1990)	Children Comedy	2.995690	116.0
153	Batman Forever (1995)	Action Adventure Comedy Crime	2.916058	137.0

In []: