In [1]:
```
import pandas as pd
import matplotlib.pyplot as plt
```

In [2]:
```
df1= pd.read_csv(r'D:\GenAi\kaggel repositories\IMDB Movie Rating Analysis\movie
df1
```

Out[2]:

	movieId	title	genres
0	1	Toy Story (1995)	Adventure|Animation|Children|Comedy|Fantasy
1	2	Jumanji (1995)	Adventure|Children|Fantasy
2	3	Grumpier Old Men (1995)	Comedy|Romance
3	4	Waiting to Exhale (1995)	Comedy|Drama|Romance
4	5	Father of the Bride Part II (1995)	Comedy
...	...	...	...
27273	131254	Kein Bund für's Leben (2007)	Comedy
27274	131256	Feuer, Eis & Dosenbier (2002)	Comedy
27275	131258	The Pirates (2014)	Adventure
27276	131260	Rentun Ruusu (2001)	(no genres listed)
27277	131262	Innocence (2014)	Adventure|Fantasy|Horror

27278 rows × 3 columns

In [3]:
```
df1.head()
```

Out[3]:

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

In [4]:
```
df1.tail()
```

Out[4]:

	movieId	title	genres
27273	131254	Kein Bund für's Leben (2007)	Comedy
27274	131256	Feuer, Eis & Dosenbier (2002)	Comedy
27275	131258	The Pirates (2014)	Adventure
27276	131260	Rentun Ruusu (2001)	(no genres listed)
27277	131262	Innocence (2014)	Adventure|Fantasy|Horror

In [5]:
```
df2= pd.read_csv(r'D:\GenAi\kaggel repositories\IMDB Movie Rating Analysis\ratin
df2
```

Out[5]:

	userId	movieId	rating	timestamp
0	1	2	3.5	2005-04-02 23:53:47
1	1	29	3.5	2005-04-02 23:31:16
2	1	32	3.5	2005-04-02 23:33:39
3	1	47	3.5	2005-04-02 23:32:07
4	1	50	3.5	2005-04-02 23:29:40
...	...	...	...	...
20000258	138493	68954	4.5	2009-11-13 15:42:00
20000259	138493	69526	4.5	2009-12-03 18:31:48
20000260	138493	69644	3.0	2009-12-07 18:10:57
20000261	138493	70286	5.0	2009-11-13 15:42:24
20000262	138493	71619	2.5	2009-10-17 20:25:36

20000263 rows × 4 columns

In [6]:
```
df2[-50:-40]
```

Out[6]:

	userId	movieId	rating	timestamp
20000213	138493	40819	4.5	2009-12-07 18:15:26
20000214	138493	41285	4.0	2009-10-17 19:04:25
20000215	138493	42738	4.5	2009-10-17 21:52:58
20000216	138493	44022	4.0	2009-12-07 18:10:49
20000217	138493	44555	5.0	2009-10-17 19:06:00
20000218	138493	45447	2.5	2009-10-17 20:24:53
20000219	138493	45517	2.5	2009-10-28 17:21:50
20000220	138493	45668	3.5	2009-10-17 20:22:10
20000221	138493	45722	3.5	2009-10-17 20:17:32
20000222	138493	46578	4.0	2009-10-17 22:17:53

In [7]:
```
md=df1.title[1:10]
md
```

Out[7]:
```
1                        Jumanji (1995)
2               Grumpier Old Men (1995)
3              Waiting to Exhale (1995)
4    Father of the Bride Part II (1995)
5                            Heat (1995)
6                         Sabrina (1995)
7                    Tom and Huck (1995)
8                    Sudden Death (1995)
9                       GoldenEye (1995)
Name: title, dtype: object
```

In [8]:
```
r=df2.rating[1:10]
r
```

Out[8]:
```
1    3.5
2    3.5
3    3.5
4    3.5
5    3.5
6    4.0
7    4.0
8    4.0
9    4.0
Name: rating, dtype: float64
```

In [9]:
```
import matplotlib.pyplot as plt
```

In [10]:
```
plt.figure(figsize=(15,5))
plt.title("Rating of first 10 movies")
plt.plot(md,r, ls= '--',color= 'green',marker = 'o',label = 'Rating')
plt.xlabel('title')
plt.ylabel('rating')
plt.grid()
plt.tight_layout()
plt.legend()
```

Out[10]: <matplotlib.legend.Legend at 0x233b61ceea0>

In [11]:
```
ld = df1[-10:-1]
ld
```

Out[11]:

	movieId	title	genres
27268	131241	Ants in the Pants (2000)	Comedy|Romance
27269	131243	Werner - Gekotzt wird später (2003)	Animation|Comedy
27270	131248	Brother Bear 2 (2006)	Adventure|Animation|Children|Comedy|Fantasy
27271	131250	No More School (2000)	Comedy
27272	131252	Forklift Driver Klaus: The First Day on the Jo...	Comedy|Horror
27273	131254	Kein Bund für's Leben (2007)	Comedy
27274	131256	Feuer, Eis & Dosenbier (2002)	Comedy
27275	131258	The Pirates (2014)	Adventure
27276	131260	Rentun Ruusu (2001)	(no genres listed)

In [12]:
```
ld['movieId']
```

Out[12]:
```
27268    131241
27269    131243
27270    131248
27271    131250
27272    131252
27273    131254
27274    131256
27275    131258
27276    131260
Name: movieId, dtype: int64
```

In [13]:
```
lr = df2[-10:-1]
lr
```

Out[13]:

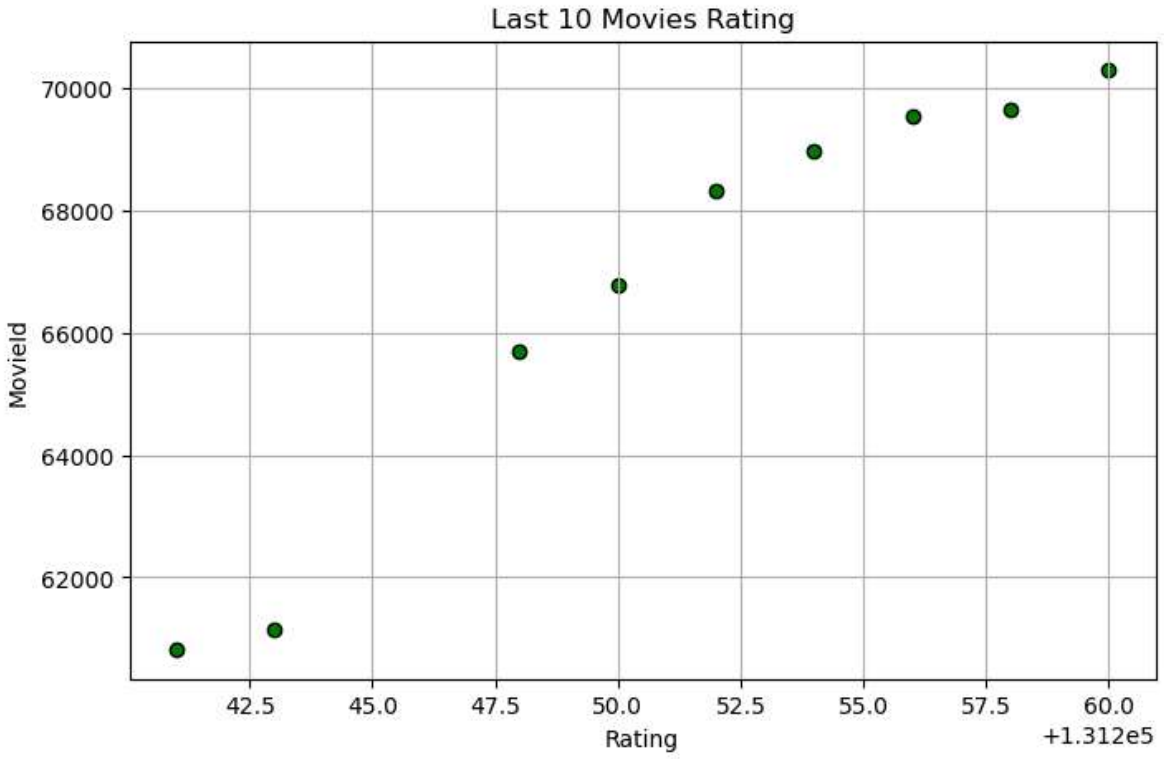
	userId	movieId	rating	timestamp
20000253	138493	60816	4.5	2009-12-03 18:32:43
20000254	138493	61160	4.0	2009-11-16 16:55:37
20000255	138493	65682	4.5	2009-10-17 21:52:53
20000256	138493	66762	4.5	2009-10-17 18:50:08
20000257	138493	68319	4.5	2009-12-07 18:15:20
20000258	138493	68954	4.5	2009-11-13 15:42:00
20000259	138493	69526	4.5	2009-12-03 18:31:48
20000260	138493	69644	3.0	2009-12-07 18:10:57
20000261	138493	70286	5.0	2009-11-13 15:42:24

In [14]:
```
lr['movieId']
```

Out[14]:
```
20000253    60816
20000254    61160
20000255    65682
20000256    66762
20000257    68319
20000258    68954
20000259    69526
20000260    69644
20000261    70286
Name: movieId, dtype: int64
```

In [15]:
```
plt.figure(figsize=(8,5))
plt.scatter(ld['movieId'],lr['movieId'],color= 'green',edgecolors='black')
plt.title("Last 10 Movies Rating")
plt.grid()
plt.xlabel("Rating")
plt.ylabel("MovieId")
```

Out[15]:
```
Text(0, 0.5, 'MovieId')
```



In [16]:
```
tags = pd.read_csv(r'D:\GenAi\kaggel repositories\IMDB Movie Rating Analysis\tag
tags
```

Out[16]:

	userId	movieId	tag	timestamp
0	18	4141	Mark Waters	2009-04-24 18:19:40
1	65	208	dark hero	2013-05-10 01:41:18
2	65	353	dark hero	2013-05-10 01:41:19
3	65	521	noir thriller	2013-05-10 01:39:43
4	65	592	dark hero	2013-05-10 01:41:18
...	...	...	...	...
465559	138446	55999	dragged	2013-01-23 23:29:32
465560	138446	55999	Jason Bateman	2013-01-23 23:29:38
465561	138446	55999	quirky	2013-01-23 23:29:38
465562	138446	55999	sad	2013-01-23 23:29:32
465563	138472	923	rise to power	2007-11-02 21:12:47

465564 rows × 4 columns

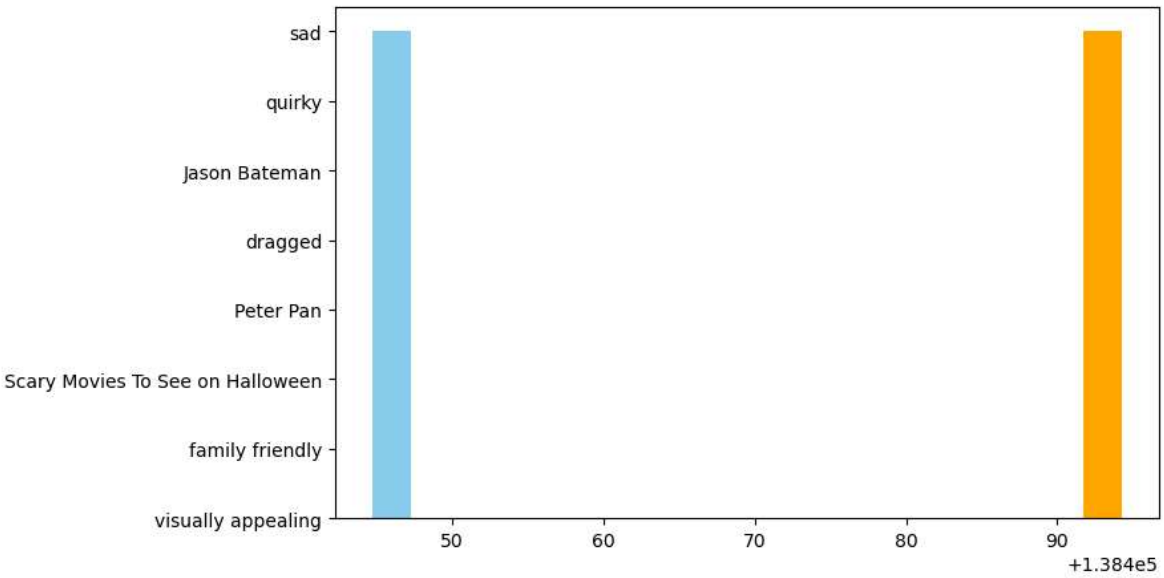
In [17]:
```
tm = tags[-10:-1]
tm
```

Out[17]:

	userId	movieId	tag	timestamp
465554	138446	3489	visually appealing	2013-01-23 23:30:22
465555	138446	7045	family friendly	2013-01-23 23:27:40
465556	138446	7045	Scary Movies To See on Halloween	2013-01-23 23:27:40
465557	138446	7164	Peter Pan	2013-01-23 23:30:55
465558	138446	7164	visually appealing	2013-01-23 23:30:55
465559	138446	55999	dragged	2013-01-23 23:29:32
465560	138446	55999	Jason Bateman	2013-01-23 23:29:38
465561	138446	55999	quirky	2013-01-23 23:29:38
465562	138446	55999	sad	2013-01-23 23:29:32

In [23]:
```
# plot bar chart
plt.figure(figsize=(8,5))
width = 2.5
plt.bar(tm["userId"],tm["tag"], color = 'skyblue',width=width,label='Tags')
plt.bar(lr["userId"],tm["tag"] , color = 'orange',width= width,label ='Userid')
```

Out[23]: <BarContainer object of 9 artists>



In [ ]: