

```
In [1]: # Importing libraries

import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

Observing the Dataset

```
In [2]: # Reading in data file
# I was able to obtain this dataset from Kaggle
MovieDataSet = pd.read_csv('/Users/josehernandez/Desktop/MoviesOnStreamingPlatforms_updated.csv')

MovieDataSet.head(10)
```

Out[2]:

	Unnamed: 0	ID	Title	Year	Age	IMDb	Rotten Tomatoes	Netflix	Hulu	Prime Video	Disney+	Type	Directors	Genres
0	0	1	Inception	2010	13+	8.8	87%	1	0	0	0	0	Christopher Nolan	Action,Adventure,Sci-Fi,Thriller
1	1	2	The Matrix	1999	18+	8.7	87%	1	0	0	0	0	Lana Wachowski,Lilly Wachowski	Action,Sci-Fi
2	2	3	Avengers: Infinity War	2018	13+	8.5	84%	1	0	0	0	0	Anthony Russo,Joe Russo	Action,Adventure,Sci-Fi
3	3	4	Back to the Future	1985	7+	8.5	96%	1	0	0	0	0	Robert Zemeckis	Adventure,Comedy,Sci-Fi
4	4	5	The Good, the Bad and the Ugly	1966	18+	8.8	97%	1	0	1	0	0	Sergio Leone	Western
5	5	6	Spider-Man: Into the Spider-Verse	2018	7+	8.4	97%	1	0	0	0	0	Bob Persichetti,Peter Ramsey,Rodney Rothman	Animation>Action,Adventure,Family,Sci-Fi
6	6	7	The Pianist	2002	18+	8.5	95%	1	0	1	0	0	Roman Polanski	Biography,Drama,Music,War
7	7	8	Django Unchained	2012	18+	8.4	87%	1	0	0	0	0	Quentin Tarantino	Drama,Western
8	8	9	Raiders of the Lost Ark	1981	7+	8.4	95%	1	0	0	0	0	Steven Spielberg	Action,Adventure
9	9	10	Inglourious Basterds	2009	18+	8.3	89%	1	0	0	0	0	Quentin Tarantino	Adventure,Drama,War

Exploring the data

```
In [5]: MovieDataSet.info()

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 16744 entries, 0 to 16743
Data columns (total 17 columns):
Unnamed: 0    16744 non-null int64
ID            16744 non-null int64
Title         16744 non-null object
Year          16744 non-null int64
Age           7354 non-null object
IMDb          16173 non-null float64
Rotten Tomatoes  5158 non-null object
Netflix       16744 non-null int64
Hulu          16744 non-null int64
Prime Video   16744 non-null int64
Disney+      16744 non-null int64
Type          16744 non-null int64
Directors      16018 non-null object
Genres        16469 non-null object
Country       16309 non-null object
Language      16145 non-null object
Runtime       16152 non-null float64
dtypes: float64(2), int64(8), object(7)
memory usage: 2.2+ MB
```

```
In [4]: MovieDataSet.describe()

Out[4]:
```

	Unnamed: 0	ID	Year	IMDb	Netflix	Hulu	Prime Video	Disney+	Type	Runtime
count	16744.000000	16744.000000	16744.000000	16173.000000	16744.000000	16744.000000	16744.000000	16744.000000	16744.0	16152.000000
mean	8371.500000	8372.500000	2003.014035	5.902751	0.212613	0.053930	0.737817	0.033684	0.0	93.413447
std	4833.720789	4833.720789	20.674321	1.347867	0.409169	0.225886	0.439835	0.180419	0.0	28.219222
min	0.000000	1.000000	1902.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.0	1.000000
25%	4185.750000	4186.750000	2000.000000	5.100000	0.000000	0.000000	0.000000	0.000000	0.0	82.000000
50%	8371.500000	8372.500000	2012.000000	6.100000	0.000000	0.000000	1.000000	0.000000	0.0	92.000000
75%	12557.250000	12558.250000	2016.000000	6.900000	0.000000	0.000000	1.000000	0.000000	0.0	104.000000
max	16743.000000	16744.000000	2020.000000	9.300000	1.000000	1.000000	1.000000	1.000000	0.0	1256.000000

Movie ranking based on IMDb scores

```
In [42]: # Using the describe function we can see that the top rated movies are in the ranking
# 3
Highest_Movies = MovieDataSet[(MovieDataSet['IMDb'] > 6.9)][['Title','IMDb']]
Highest_Movies
```

Out[42]:

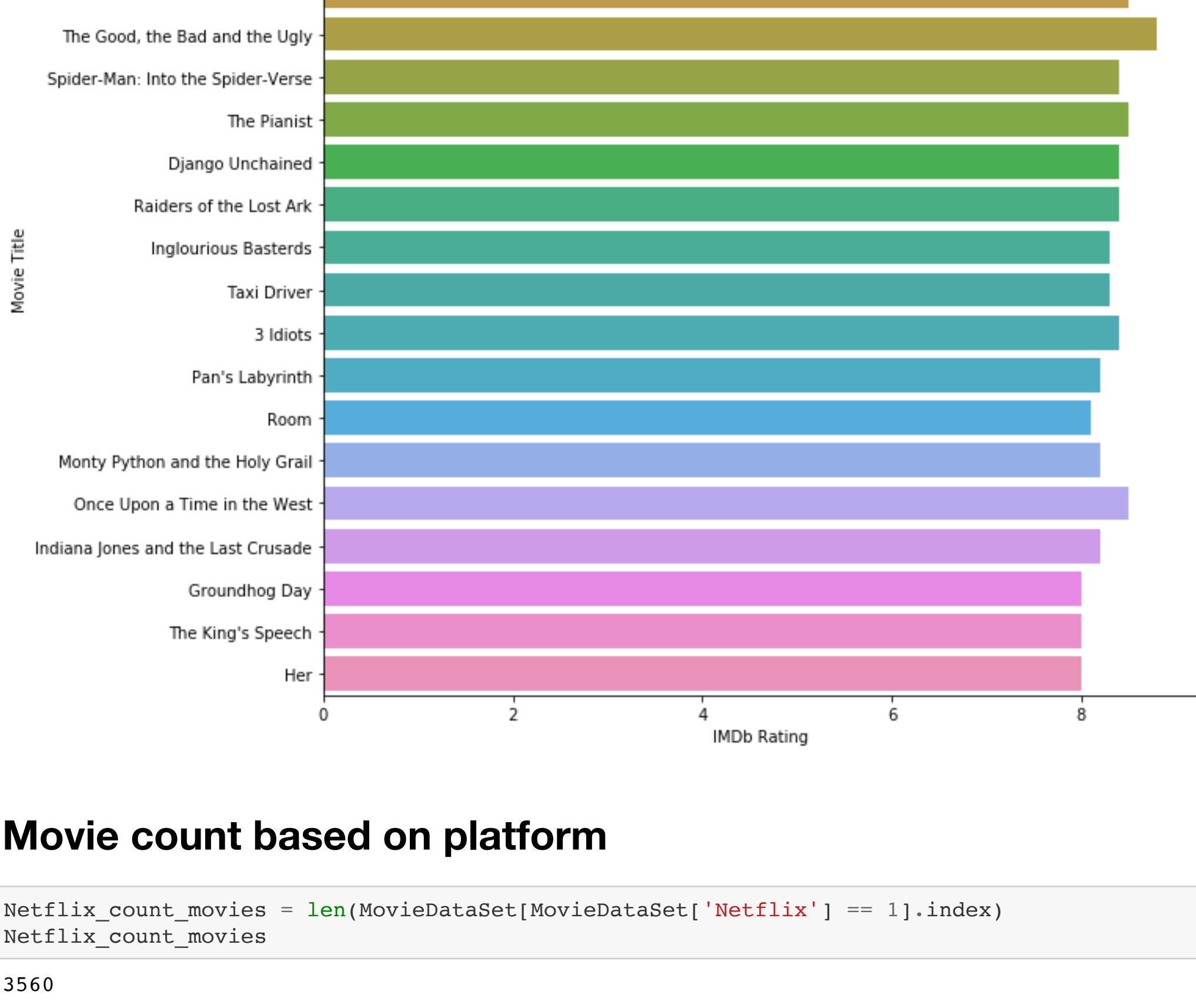
	Title	IMDb
0	Inception	8.8
1	The Matrix	8.7
2	Avengers: Infinity War	8.5
3	Back to the Future	8.5
4	The Good, the Bad and the Ugly	8.8
...
16709	Prowlers of the Everglades	8.0
16714	Drain The Ocean: WWII	7.0
16717	Kingdom of the Blue Whale	7.3
16722	Secrets of Life	7.2
16733	Sea of Hope: America's Underwater Treasures	7.3

3795 rows x 2 columns

```
In [83]: # Highest Ranking movies
xbar = Highest_Movies['IMDb'].head(20)
ybar = Highest_Movies['Title'].head(20)

plt.figure(figsize = (10,10))

sns.barplot(xbar,ybar,data = Highest_Movies)
plt.ylabel('Movie Title')
plt.xlabel('IMDb Rating')
plt.title('Highest Rated Movies of All Platforms')
plt.show()
```



Movie count based on platform

```
In [221]: Netflix_count_movies = len(MovieDataSet[MovieDataSet['Netflix'] == 1].index)
Netflix_count_movies
```

Out[221]: 3560

```
In [222]: Hulu_count_movies = len(MovieDataSet[MovieDataSet['Hulu'] == 1].index)
Hulu_count_movies
```

Out[222]: 903

```
In [223]: Prime_count_movies = len(MovieDataSet[MovieDataSet['Prime Video'] == 1].index)
Prime_count_movies
```

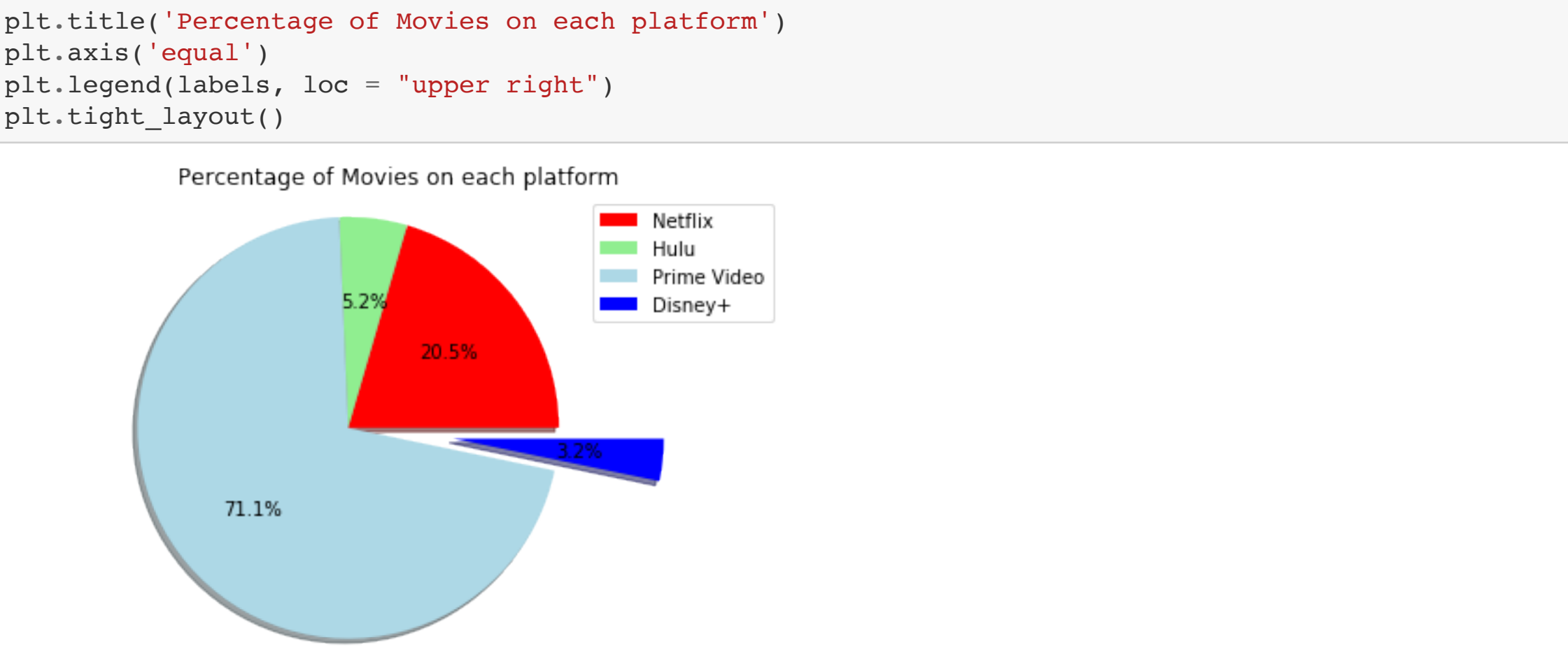
Out[223]: 12354

```
In [224]: Disney_count_movies = len(MovieDataSet[MovieDataSet['Disney+'] == 1].index)
Disney_count_movies
```

Out[224]: 564

```
In [225]: # Organizing the data above
Platform_Movies = [Netflix_count_movies,Hulu_count_movies,Prime_count_movies,Disney_count_movies]
```

```
In [226]: # Plotting
```



```
In [111]: # Disney being the least could be because it just released in late 2019
# Highest rated movie in each platform
```

```
In [198]: Highest_Movie_Netflix = MovieDataSet[(MovieDataSet['IMDb'] > 6.9) & MovieDataSet['Netflix'] == 1][
['Title','IMDb']].sort_values('IMDb',ascending = False)

Top_rate_netflix = Highest_Movie_Netflix.head(10)
Top_rate_netflix
```

Out[198]:

	Title	IMDb
1292	My Next Guest with David Letterman and Shah Ru...	9.3
947	Natsamrat	9.1
0	Inception	8.8
4	The Good, the Bad and the Ugly	8.8
1	The Matrix	8.7
1458	Untamed Romania	8.7
1311	Eh Janam Tumhare Lekhe	8.7
1979	One Heart: The A.R. Rahman Concert Film	8.7
1214	Bill Hicks: Relentless	8.7
1468	K. D.	8.6

```
In [197]: Highest_Movie_Hulu = MovieDataSet[(MovieDataSet['IMDb'] > 6.9) & MovieDataSet['Hulu'] == 1][
['Title','IMDb']].sort_values('IMDb',ascending = False)

Top_rate_hulu = Highest_Movie_Hulu.head(10)
Top_rate_hulu
```

Out[197]:

	Title	IMDb
3560	The Dark Knight	9.0
3561	GoodFellas	8.7
3564	The Green Mile	8.6
3562	Parasite	8.6
3566	Grave of the Fireflies	8.5
4283	Brad Paisley Thinks He's Special	8.5
3742	Andy Irons: Kissed by God	8.3
3890	Larger than Life: The Keyvin Aucoin Story	8.3
3563	Good Will Hunting	8.3
3580	Free Solo	8.2

```
In [199]: Highest_Movie_Prime = MovieDataSet[(MovieDataSet['IMDb'] > 6.9) & MovieDataSet['Prime Video'] == 1][
['Title','IMDb']].sort_values('IMDb',ascending = False)

Top_rate_prime = Highest_Movie_Prime.head(10)
Top_rate_prime
```

Out[199]:

	Title	IMDb
7426	Bounty	9.3
5110	Love on a Leash	9.3
7220	Down, But Not Out!	9.3
6566	Square One	9.3
6837	Steven Banks: Home Entertainment Center	9.3
8458	Where's Daddy?	9.1
7491	Finding Family	9.1
7267	A Dog Named Gucci	9.0
7002	Escape from Firebase Kate	9.0
8271	Arise	8.9

```
In [200]: Highest_Movie_Disney = MovieDataSet[(MovieDataSet['IMDb'] > 6.9) & MovieDataSet['Disney+'] == 1][
['Title','IMDb']].sort_values('IMDb',ascending = False)

Top_rate_disney = Highest_Movie_Disney.head(10)
Top_rate_disney
```

Out[200]:

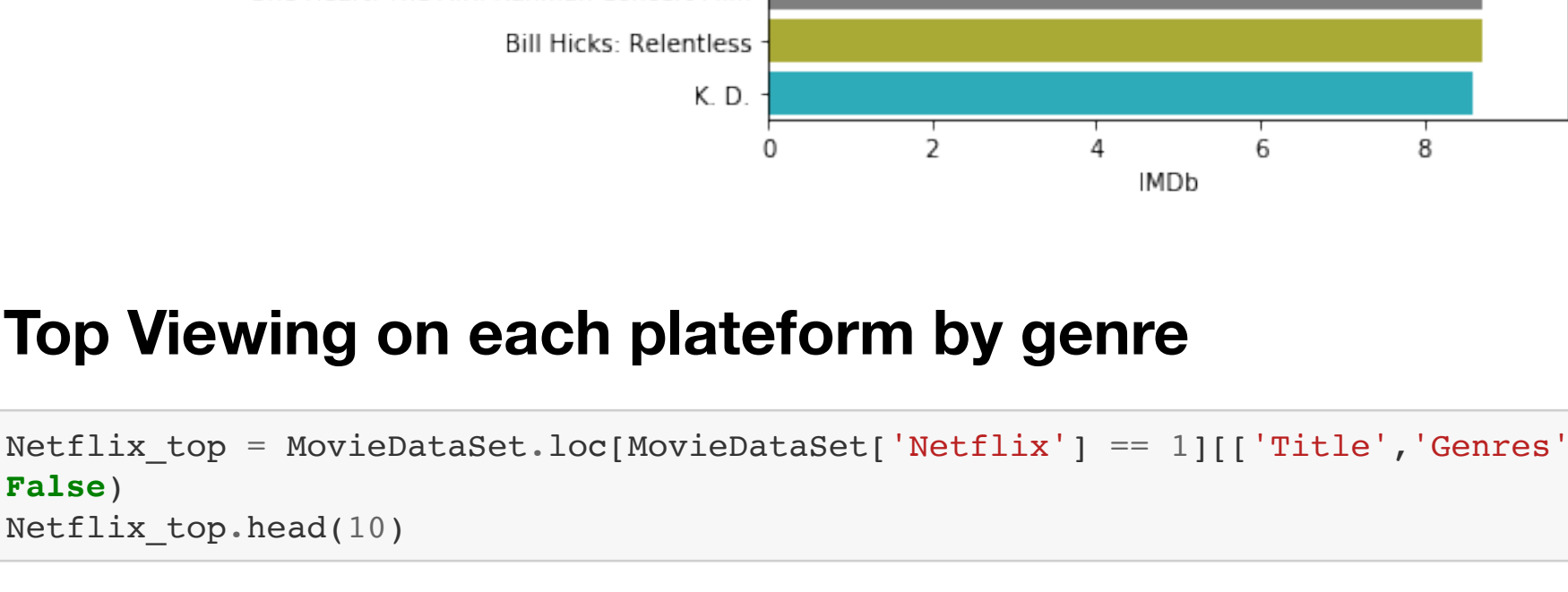
	Title	IMDb
16213	Star Wars: The Empire Strikes Back	8.7
16212	Star Wars: A New Hope	8.6
16214	The Lion King	8.5
16441	Newsies: The Broadway Musical	8.5
16221	Coco	8.4
16217	WALL-E	8.4
16216	Avengers: Endgame	8.4
5401	Empire of Dreams: The Story of the Star Wars T...	8.3
16224	Star Wars: Return of the Jedi	8.3
16215	Toy Story	8.3

```
In [ ]: Top_rate_netflix
Top_rate_hulu
Top_rate_prime
Top_rate_disney
```

```
In [208]: # Top 10 rated movies on netflix
```

```
sns.barplot(Top_rate_netflix['IMDb'],Top_rate_netflix['Title'])

Out[208]: <matplotlib.axes._subplots.AxesSubplot at 0xia3530cbd0>
```



Top Viewing on each platform by genre

```
In [216]: Netflix_top = MovieDataSet.loc[MovieDataSet['Netflix'] == 1][['Title','Genres','IMDb']].sort_values('IMDb',ascending = False)
Netflix_top.head(10)
```

Out[216]:

	Title	Genres	IMDb
1292	My Next Guest with David Letterman and Shah Ru...	Talk-Show	9.3
947	Natsamrat	Drama,Family	9.1
4	The Good, the Bad and the Ugly	Western	8.8
0	Inception	Action,Adventure,Sci-Fi,Thriller	8.8
1214	Bill Hicks: Relentless	Documentary,Comedy	8.7
1311	Eh Janam Tumhare Lekhe	Biography	8.7
1	The Matrix	Action,Sci-Fi	8.7
1979	One Heart: The A.R. Rahman Concert Film	Documentary,Music	8.7
1458	Untamed Romania	Documentary	8.7
1356	Merku Thodarchi Malai	Drama	8.6

```
In [217]: Hulu_top = MovieDataSet.loc[MovieDataSet['Hulu'] == 1][['Title','Genres','IMDb']].sort_values('IMDb',ascending = False)
Hulu_top.head(10)
```

Out[217]:

	Title	Genres	IMDb
3560	The Dark Knight	Action,Crime,Drama,Thriller	9.0
3561	GoodFellas	Biography,Crime,Drama	8.7
3562	Parasite	Comedy,Drama,Thriller	8.6
3564	The Green Mile	Crime,Drama,Fantasy,Mystery	8.6
3566	Grave of the Fireflies	Animation,Drama,War	8.5
4283	Brad Paisley Thinks He's Special	Music	8.5
3742	Andy Irons: Kissed by God	Documentary	8.3
3890	Larger than Life: The Keyvin Aucoin Story	Documentary	8.3
3563	Good Will Hunting	Drama,Romance	8.3
3577	Portrait of a Lady on Fire	Drama,Romance	8.2

```
In [220]: Prime_top = MovieDataSet.loc[MovieDataSet['Prime Video'] == 1][['Title','Genres','IMDb']].sort_values('IMDb',ascending = False)
Prime_top.head(10)
```

Out[220]:

	Title	Genres	IMDb
6566	Square One	Documentary,Drama,Music	9.3
5110	Love on a Leash	Comedy,Drama,Fantasy,Romance	9.3
6837	Steven Banks: Home Entertainment Center	Comedy	9.3
7220	Down, But Not Out!	Documentary,Sport	9.3
7426	Bounty	Adventure,Drama,History,Romance	9.3
8458	Where's Daddy?	Documentary	9.1
7491	Finding Family	Documentary,Family,History,War	9.1
7267	A Dog Named Gucci	Documentary,Biography,Drama,News	9.0
7002	Escape from Firebase Kate	Documentary	9.0
8169	The Creators	Documentary,History,Music,News	8.9

```
In [219]: Disney_top = MovieDataSet.loc[MovieDataSet['Disney+'] == 1][['Title','Genres','IMDb']].sort_values('IMDb',ascending = False)
Disney_top.head(10)
```

Out[219]:

	Title	Genres	IMDb
16213	Star Wars: The Empire Strikes Back	Action,Adventure,Fantasy,Sci-Fi	8.7
16212	Star Wars: A New Hope	Action,Adventure,Fantasy,Sci-Fi	8.6
16441	Newsies: The Broadway Musical	Musical	8.5
16214	The Lion King	Animation,Adventure,Family,Fantasy,Music,Mystery	8.5
16221	Coco	Animation,Adventure,Family,Fantasy,Music,Mystery	8.4
16217	WALL-E	Animation,Adventure,Family,Sci-Fi	8.4
16216	Avengers: Endgame	Action,Adventure,Drama,Sci-Fi	8.4
16309	Before the Flood	Documentary	8.3
16582	Phineas and Ferb: Mission Marvel	Animation>Action,Comedy,Family,Musical,Sci-Fi	8.3
16224	Star Wars: Return of the Jedi	Action,Adventure,Fantasy,Sci-Fi	8.3

```
In [ ]: 
```