

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

```
In [2]: 1 header = {'user-Agent': 'Mozilla/5.0(Windows NT 6.3;Win64;x64)AppleWebkit/537.36(KHTML,like Gecko)Chrome/99.0.4844.51  
2  
3 html_response = requests.get('https://www.themoviedb.org/movie',headers=header)
```

```
In [3]: 1 html_response
```

Out[3]: <Response [200]>

```
In [4]: 1 from bs4 import BeautifulSoup  
2 content = html_response.text  
3 soup = BeautifulSoup(content, 'lxml')  
4 print(soup)
```

```
<link href="/assets/2/v4/discover-421028eba2c3eaf5699e02314870662bfc46a923ce94d25af7cfb312dd37ad93.css" media="screen" rel="stylesheet"/>  
<link href="/assets/2/v4/account-3a7e7607340c2ba9de9204b09ee40d73a687e5df2b2f7f6194e034fa8fd869c7.css" media="screen" rel="stylesheet"/>  
<link href="https://www.themoviedb.org/movie" hreflang="x-default" rel="alternate"/>  
<link href="https://www.themoviedb.org/movie?language=af-ZA" hreflang="af-ZA" rel="alternate"/>  
<link href="https://www.themoviedb.org/movie?language=ar-SA" hreflang="ar-SA" rel="alternate"/>  
<link href="https://www.themoviedb.org/movie?language=be-BY" hreflang="be-BY" rel="alternate"/>  
<link href="https://www.themoviedb.org/movie?language=bg-BG" hreflang="bg-BG" rel="alternate"/>  
<link href="https://www.themoviedb.org/movie?language=bn-BD" hreflang="bn-BD" rel="alternate"/>  
<link href="https://www.themoviedb.org/movie?language=ca-ES" hreflang="ca-ES" rel="alternate"/>  
<link href="https://www.themoviedb.org/movie?language=ch-GU" hreflang="ch-GU" rel="alternate"/>  
<link href="https://www.themoviedb.org/movie?language=cn-CN" hreflang="cn-CN" rel="alternate"/>  
<link href="https://www.themoviedb.org/movie?language=cs-CZ" hreflang="cs-CZ" rel="alternate"/>  
<link href="https://www.themoviedb.org/movie?language=cy-GB" hreflang="cy-GB" rel="alternate"/>  
<link href="https://www.themoviedb.org/movie?language=da-DK" hreflang="da-DK" rel="alternate"/>  
<link href="https://www.themoviedb.org/movie?language=de-DE" hreflang="de-DE" rel="alternate"/>  
<link href="https://www.themoviedb.org/movie?language=el-GR" hreflang="el-GR" rel="alternate"/>  
<link href="https://www.themoviedb.org/movie?language=en-US" hreflang="en-US" rel="alternate"/>
```

In [5]:

```
1 movie_name = soup.find('div',class_="card style_1").h2.text
2 movie_ratings = soup.find('div',class_='user_score_chart 57d1b0c49251410cae0003fd')['data-percent']
3 movie_link = soup.find('div',class_="card style_1").a['href']
4 mov_link = 'https://www.themoviedb.org/' + movie_link
5 url2 = requests.get(mov_link,headers = header)
6 mo_url = BeautifulSoup(url2.text,'lxml')
7 mo_url
8 movie_genre = mo_url.find('span',class_='genres').text.strip().replace(',','')
9 movie_release = mo_url.find('span',class_='release').text.strip().replace('(IN)', '')
10 movie_runtime = mo_url.find('span',class_='runtime').text.strip()
11 movie_dir = mo_url.find('li',class_='profile').a.text
12
13
14 print(movie_name)
15 print(movie_ratings)
16 print(movie_release)
17 print(movie_genre)
18 print(movie_runtime)
19 print(movie_dir)
20
21
```

The Batman  
79.0  
03/04/2022  
Crime, Mystery, Thriller  
2h 56m  
Matt Reeves

### **class = card style\_1**

In [6]:

```
1 page_1_movie = soup.find_all('div',class_='card style_1')
2 for item in page_1_movie:
3     movie_name = soup.find('div',class_="card style_1").h2.text
4     movie_ratings = soup.find('div',class_="user_score_chart 57d1b0c49251410cae0003fd")['data-percent']
5     movie_link = soup.find('div',class_="card style_1").a['href']
6     mov_link = 'https://www.themoviedb.org/' + movie_link
7     url2 = requests.get(mov_link,headers = header)
8     mo_url = BeautifulSoup(url2.text,'lxml')
9     mo_url
10    movie_genre = mo_url.find('span',class_='genres').text.strip().replace(',',';')
11    movie_release = mo_url.find('span',class_='release').text.strip().replace('(IN)', '')
12    movie_runtime = mo_url.find('span',class_='runtime').text.strip()
13    movie_dir = mo_url.find('li',class_='profile').a.text
14
15    my_movie_dict = {
16        'Movie Name':movie_name,
17        'Movie Ratings':movie_ratings,
18        'movie Link':mov_link,
19        'Movie Genre':movie_genre,
20        'Movie Release':movie_release,
21        'Movie Runtime':movie_runtime,
22        'Movie Dir':movie_dir
23    }
24    print(my_movie_dict)
25
```

```
{'Movie Name': 'The Batman', 'Movie Ratings': '79.0', 'movie Link': 'https://www.themoviedb.org//movie/414906', 'Movie
Genre': 'Crime,\xa0Mystery,\xa0Thriller', 'Movie Release': '03/04/2022 ', 'Movie Runtime': '2h 56m', 'Movie Dir': 'Matt
Reeves'}
{'Movie Name': 'The Batman', 'Movie Ratings': '79.0', 'movie Link': 'https://www.themoviedb.org//movie/414906', 'Movie
Genre': 'Crime,\xa0Mystery,\xa0Thriller', 'Movie Release': '03/04/2022 ', 'Movie Runtime': '2h 56m', 'Movie Dir': 'Matt
Reeves'}
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Reeves'}
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Genre': 'Crime,\xa0Mystery,\xa0Thriller', 'Movie Release': '03/04/2022 ', 'Movie Runtime': '2h 56m', 'Movie Dir': 'Matt
Reeves'}
{'Movie Name': 'The Batman', 'Movie Ratings': '79.0', 'movie Link': 'https://www.themoviedb.org//movie/414906', 'Movie
Genre': 'Crime,\xa0Mystery,\xa0Thriller', 'Movie Release': '03/04/2022 ', 'Movie Runtime': '2h 56m', 'Movie Dir': 'Matt
Reeves'}
```

```
Reeves'}
{'Movie Name': 'The Batman', 'Movie Ratings': '79.0', 'movie Link': 'https://www.themoviedb.org//movie/414906', 'Movie
Genre': 'Crime,\xa0Mystery,\xa0Thriller', 'Movie Release': '03/04/2022 ', 'Movie Runtime': '2h 56m', 'Movie Dir': 'Matt
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Reeves'}
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Genre': 'Crime,\xa0Mystery,\xa0Thriller', 'Movie Release': '03/04/2022 ', 'Movie Runtime': '2h 56m', 'Movie Dir': 'Matt
Reeves'}
{'Movie Name': 'The Batman', 'Movie Ratings': '79.0', 'movie Link': 'https://www.themoviedb.org//movie/414906', 'Movie
Genre': 'Crime,\xa0Mystery,\xa0Thriller', 'Movie Release': '03/04/2022 ', 'Movie Runtime': '2h 56m', 'Movie Dir': 'Matt
Reeves'}
{'Movie Name': 'The Batman', 'Movie Ratings': '79.0', 'movie Link': 'https://www.themoviedb.org//movie/414906', 'Movie
Genre': 'Crime,\xa0Mystery,\xa0Thriller', 'Movie Release': '03/04/2022 ', 'Movie Runtime': '2h 56m', 'Movie Dir': 'Matt
Reeves'}
{'Movie Name': 'The Batman', 'Movie Ratings': '79.0', 'movie Link': 'https://www.themoviedb.org//movie/414906', 'Movie
Genre': 'Crime,\xa0Mystery,\xa0Thriller', 'Movie Release': '03/04/2022 ', 'Movie Runtime': '2h 56m', 'Movie Dir': 'Matt
Reeves'}
```

```
Reeves'}
```

```
{'Movie Name': 'The Batman', 'Movie Ratings': '79.0', 'movie Link': 'https://www.themoviedb.org//movie/414906', 'Movie Genre': 'Crime,\xa0Mystery,\xa0Thriller', 'Movie Release': '03/04/2022 ', 'Movie Runtime': '2h 56m', 'Movie Dir': 'Matt Reeves'}
```

```
In [7]: 1 url = 'https://www.themoviedb.org/movie?page='
```

```
In [8]: 1 url
```

```
Out[8]: 'https://www.themoviedb.org/movie?page='
```

```
In [9]: 1 lst_url = []
2 for value in range(1,201):
3     lst_url.append(url+str(value))
```

```
In [10]: 1 for val in lst_url:
2     print(val)
```

```
https://www.themoviedb.org/movie?page=1 (https://www.themoviedb.org/movie?page=1)
https://www.themoviedb.org/movie?page=2 (https://www.themoviedb.org/movie?page=2)
https://www.themoviedb.org/movie?page=3 (https://www.themoviedb.org/movie?page=3)
https://www.themoviedb.org/movie?page=4 (https://www.themoviedb.org/movie?page=4)
https://www.themoviedb.org/movie?page=5 (https://www.themoviedb.org/movie?page=5)
https://www.themoviedb.org/movie?page=6 (https://www.themoviedb.org/movie?page=6)
https://www.themoviedb.org/movie?page=7 (https://www.themoviedb.org/movie?page=7)
https://www.themoviedb.org/movie?page=8 (https://www.themoviedb.org/movie?page=8)
https://www.themoviedb.org/movie?page=9 (https://www.themoviedb.org/movie?page=9)
https://www.themoviedb.org/movie?page=10 (https://www.themoviedb.org/movie?page=10)
https://www.themoviedb.org/movie?page=11 (https://www.themoviedb.org/movie?page=11)
https://www.themoviedb.org/movie?page=12 (https://www.themoviedb.org/movie?page=12)
https://www.themoviedb.org/movie?page=13 (https://www.themoviedb.org/movie?page=13)
https://www.themoviedb.org/movie?page=14 (https://www.themoviedb.org/movie?page=14)
https://www.themoviedb.org/movie?page=15 (https://www.themoviedb.org/movie?page=15)
https://www.themoviedb.org/movie?page=16 (https://www.themoviedb.org/movie?page=16)
https://www.themoviedb.org/movie?page=17 (https://www.themoviedb.org/movie?page=17)
https://www.themoviedb.org/movie?page=18 (https://www.themoviedb.org/movie?page=18)
https://www.themoviedb.org/movie?page=19 (https://www.themoviedb.org/movie?page=19)
https://www.themoviedb.org/movie?page=20 (https://www.themoviedb.org/movie?page=20)
```

In [11]:

```
1 ldt = []
2 def almv():
3     for link in lst_url:
4         response = requests.get(link,headers= header)
5         html_text = response.text
6         movie_soup = BeautifulSoup(html_text,'lxml')
7         movie_list = movie_soup.find_all('div',class_='card style_1')
8         for item in movie_list:
9             movie_name = item.find('div',class_="content").h2.text
10            movie_ratings = item.find('div',class_='user_score_chart')['data-percent']
11            movie_link = item.find('div',class_="content").a['href']
12            mov_link = 'https://www.themoviedb.org/' + movie_link
13            url2 = requests.get(mov_link,headers = header)
14            mo_url = BeautifulSoup(url2.text,'lxml')
15            mo_url
16            movie_genre = mo_url.find('span',class_='genres').text.strip().replace(',','')
17            movie_release = mo_url.find('span',class_='release').text.strip().replace('(IN)', '')
18            movie_runtime = mo_url.find('span',class_='runtime')
19            if movie_runtime is not None:
20                movie_runtime=(movie_runtime.text.strip())
21            movie_dir = mo_url.find('li',class_='profile')
22            if movie_dir is not None:
23                movie_dir=(movie_dir.a.text)
24
25            my_movie_dict = {
26                'Movie Name':movie_name,
27                'Movie Ratings':movie_ratings,
28                'Movie Link':mov_link,
29                'Movie Genre':movie_genre,
30                'Movie Release':movie_release,
31                'Movie Runtime':movie_runtime,
32                'Movie Dir':movie_dir
33            }
34            ldt.append(my_movie_dict)
35 almv()
```

In [12]:

```

1 movie_df = pd.DataFrame(ldt)
2 movie_df

```

Out[12]:

	Movie Name	Movie Ratings	Movie Link	Movie Genre	Movie Release	Movie Runtime	Movie Dir
0	The Batman	79.0	<a href="https://www.themoviedb.org/movie/414906">https://www.themoviedb.org/movie/414906</a>	Crime, Mystery, Thriller	03/04/2022	2h 56m	Matt Reeves
1	Spider-Man: No Way Home	81.0	<a href="https://www.themoviedb.org/movie/634649">https://www.themoviedb.org/movie/634649</a>	Action, Adventure, Science Fiction	12/17/2021	2h 28m	Steve Ditko
2	The Outfit	70	<a href="https://www.themoviedb.org/movie/799876">https://www.themoviedb.org/movie/799876</a>	Drama, Thriller, Crime	03/18/2022 (US)	1h 45m	Graham Moore
3	Turning Red	75.0	<a href="https://www.themoviedb.org/movie/508947">https://www.themoviedb.org/movie/508947</a>	Animation, Family, Comedy, Fantasy	03/10/2022 (CZ)	1h 40m	Domee Shi
4	Yaksha: Ruthless Operations	60	<a href="https://www.themoviedb.org/movie/606402">https://www.themoviedb.org/movie/606402</a>	Action	04/08/2022 (KR)	2h 5m	Na Hyun
...	...	...	...	...	...	...	...
3995	The Girl on the Train	59.0	<a href="https://www.themoviedb.org/movie/695958">https://www.themoviedb.org/movie/695958</a>	Drama, Thriller	02/26/2021	2h 8m	Ribhu Dasgupta
3996	Don't Be Afraid of the Dark	57.0	<a href="https://www.themoviedb.org/movie/46261">https://www.themoviedb.org/movie/46261</a>	Fantasy, Horror, Thriller	08/25/2011 (AU)	1h 39m	Troy Nixey
3997	Fantastic Mr. Fox	78.0	<a href="https://www.themoviedb.org/movie/10315">https://www.themoviedb.org/movie/10315</a>	Adventure, Animation, Comedy, Family	11/25/2009 (US)	1h 27m	Wes Anderson
3998	Kin	62.0	<a href="https://www.themoviedb.org/movie/425505">https://www.themoviedb.org/movie/425505</a>	Science Fiction, Action	08/31/2018 (US)	1h 42m	Josh Baker
3999	The Social Dilemma	75.0	<a href="https://www.themoviedb.org/movie/656690">https://www.themoviedb.org/movie/656690</a>	Documentary, Drama	09/09/2020 (ES)	1h 34m	Jeff Orlowski

4000 rows × 7 columns

```
In [14]: 1 import numpy as np  
2 import pandas as pd  
3 import matplotlib.pyplot as plt  
4 import seaborn as sns  
5 import plotly.express as px  
6
```

```
In [15]: 1 data1 = pd.read_csv(r'C:\Users\Tejas\All_Movie_Pages.csv')
```

```
In [16]: 1 movie_data = pd.DataFrame(data1)
```

In [17]: 1 movie\_data

Out[17]:

	Unnamed: 0	Movie Name	Movie Ratings	Movie Link	Movie Genre	Movie Release	Movie Runtime	Movie Dir
0	0	The Batman	79.0	https://www.themoviedb.org//movie/414906	Crime, Mystery, Thriller	03/04/2022	2h 56m	Matt Reeves
1	1	The Outfit	72.0	https://www.themoviedb.org//movie/799876	Drama, Thriller, Crime	03/18/2022 (US)	1h 45m	Graham Moore
2	2	Spider-Man: No Way Home	81.0	https://www.themoviedb.org//movie/634649	Action, Adventure, Science Fiction	12/17/2021	2h 28m	Stan Lee
3	3	Turning Red	75.0	https://www.themoviedb.org//movie/508947	Animation, Family, Comedy, Fantasy	03/10/2022 (CZ)	1h 40m	Domee Shi
4	4	Sonic the Hedgehog 2	77.0	https://www.themoviedb.org//movie/675353	Action, Science Fiction, Comedy, Family	04/08/2022 (US)	2h 2m	Patrick Casey
...	...	...	...	...	...	...	...	...
3995	3995	The Jurassic Games	46.0	https://www.themoviedb.org//movie/504982	Science Fiction, Action, Horror	05/21/2018 (US)	1h 26m	Ryan Bellgardt
3996	3996	Bad Luck Banging or Loony Porn	65.0	https://www.themoviedb.org//movie/790496	Comedy, Drama	11/26/2021 (RO)	1h 46m	Radu Jude
3997	3997	Winnie the Pooh: Springtime with Roo	66.0	https://www.themoviedb.org//movie/16394	Family, Animation	03/09/2004 (US)	1h 5m	A. A. Milne
3998	3998	Midnight in Paris	75.0	https://www.themoviedb.org//movie/59436	Fantasy, Comedy, Romance	05/20/2011 (US)	1h 34m	Woody Allen
3999	3999	Driving Miss Daisy	73.0	https://www.themoviedb.org//movie/403	Drama	01/26/1990 (US)	1h 39m	Alfred Uhry

4000 rows × 8 columns

```
In [18]: 1 movie_data.isnull().sum()
```

```
Out[18]: Unnamed: 0      0
Movie Name        0
Movie Ratings    0
Movie Link        0
Movie Genre       20
Movie Release     0
Movie Runtime     56
Movie Dir         33
dtype: int64
```

```
In [19]: 1 movie_data.fillna(value=0,inplace=True)
```

```
In [20]: 1 movie_data.isnull().sum()
```

```
Out[20]: Unnamed: 0      0
Movie Name        0
Movie Ratings    0
Movie Link        0
Movie Genre       0
Movie Release     0
Movie Runtime     0
Movie Dir         0
dtype: int64
```

```
In [21]: 1 movie_Data = movie_data.drop('Unnamed: 0',axis=1)
```

In [22]: 1 movie\_Data

Out[22]:

	Movie Name	Movie Ratings	Movie Link	Movie Genre	Movie Release	Movie Runtime	Movie Dir
0	The Batman	79.0	https://www.themoviedb.org//movie/414906	Crime, Mystery, Thriller	03/04/2022	2h 56m	Matt Reeves
1	The Outfit	72.0	https://www.themoviedb.org//movie/799876	Drama, Thriller, Crime	03/18/2022 (US)	1h 45m	Graham Moore
2	Spider-Man: No Way Home	81.0	https://www.themoviedb.org//movie/634649	Action, Adventure, Science Fiction	12/17/2021	2h 28m	Stan Lee
3	Turning Red	75.0	https://www.themoviedb.org//movie/508947	Animation, Family, Comedy, Fantasy	03/10/2022 (CZ)	1h 40m	Domee Shi
4	Sonic the Hedgehog 2	77.0	https://www.themoviedb.org//movie/675353	Action, Science Fiction, Comedy, Family	04/08/2022 (US)	2h 2m	Patrick Casey
...	...	...	...	...	...	...	...
3995	The Jurassic Games	46.0	https://www.themoviedb.org//movie/504982	Science Fiction, Action, Horror	05/21/2018 (US)	1h 26m	Ryan Bellgardt
3996	Bad Luck Banging or Loony Porn	65.0	https://www.themoviedb.org//movie/790496	Comedy, Drama	11/26/2021 (RO)	1h 46m	Radu Jude
3997	Winnie the Pooh: Springtime with Roo	66.0	https://www.themoviedb.org//movie/16394	Family, Animation	03/09/2004 (US)	1h 5m	A. A. Milne
3998	Midnight in Paris	75.0	https://www.themoviedb.org//movie/59436	Fantasy, Comedy, Romance	05/20/2011 (US)	1h 34m	Woody Allen
3999	Driving Miss Daisy	73.0	https://www.themoviedb.org//movie/403	Drama	01/26/1990 (US)	1h 39m	Alfred Uhry

4000 rows × 7 columns

In [23]:

```
1 #top 10 ratings by movie name
2 top_10_Ratings = movie_Data.groupby(['Movie Name'])['Movie Ratings'].sum()
3 top_10 = top_10_Ratings.sort_values(ascending=False).head(10)
4 pd.DataFrame(top_10)
```

Out[23]:

Movie Ratings

Movie Name	
<b>Beauty and the Beast</b>	208.0
<b>Cinderella</b>	203.0
<b>Halloween</b>	203.0
<b>Robin Hood</b>	196.0
<b>Carrie</b>	195.0
<b>Scarface</b>	157.0
<b>The Lion King</b>	154.0
<b>Mulan</b>	149.0
<b>Aladdin</b>	147.0
<b>Dawn of the Dead</b>	145.0

```
In [24]: 1 #movie ratings by release Date  
2 movie_Data.groupby('Movie Release')[ 'Movie Ratings' ].mean().sort_values(ascending=False).head(10)
```

```
Out[24]: Movie Release  
04/21/2022 (AR)    100.0  
10/14/2020 (MX)    91.0  
11/18/2021 (RU)    90.0  
08/19/2021 (MX)    88.0  
03/14/1972 (US)    87.0  
10/14/1994          87.0  
09/18/2020 (JP)    86.0  
04/14/2022          86.0  
06/13/1994          86.0  
12/20/1974 (US)    86.0  
Name: Movie Ratings, dtype: float64
```

In [25]:

```
1 # top20 rating, movie names and directors
2 movie_Data.nlargest(20,'Movie Ratings')[['Movie Name','Movie Ratings','Movie Dir']].set_index('Movie Name')
```

Out[25]:

Movie Name	Movie Ratings		Movie Dir
<b>Virus:32</b>	100.0	Gustavo Hernández	
<b>The Three Deaths of Marisela Escobedo</b>	91.0	Carlos Pérez Osorio	
<b>Mission «Sky»</b>	90.0	Igor Kopylov	
<b>Everything Everywhere All at Once</b>	88.0	Daniel Kwan	
<b>Demon Slayer: Kimetsu no Yaiba Sibling's Bond</b>	88.0	Haruo Sotozaki	
<b>Ni tuyo, Ni mía</b>	88.0	Sandra Solares	
<b>The Shawshank Redemption</b>	87.0	Frank Darabont	
<b>The Godfather</b>	87.0	Francis Ford Coppola	
<b>Polar Bear</b>	87.0	Alastair Fothergill	
<b>K.G.F: Chapter 2</b>	86.0	Prashanth Neel	
<b>The Godfather: Part II</b>	86.0	Francis Ford Coppola	
<b>Schindler's List</b>	86.0	Steven Spielberg	
<b>Impossible Things</b>	86.0	Ernesto Contreras	
<b>Josee, the Tiger and the Fish</b>	86.0	Kotaro Tamura	
<b>Violet Evergarden: The Movie</b>	86.0	Taichi Ishidate	
<b>Your Name.</b>	85.0	Makoto Shinkai	
<b>Evangelion: 3.0+1.0 Thrice Upon a Time</b>	85.0	Hideaki Anno	
<b>Given</b>	85.0	Hikaru Yamaguchi	
<b>Rascal Does Not Dream of a Dreaming Girl</b>	85.0	Souichi Masui	
<b>The Green Mile</b>	85.0	Frank Darabont	

```
In [26]: 1 #top 10 days maximum movie release.  
2 movie_Data['Movie Release'].value_counts().head(10)
```

```
Out[26]: 04/22/2022 (US)    11  
10/08/2021 (US)      8  
10/01/2021 (US)      7  
03/18/2022 (US)      7  
10/11/2019 (US)      6  
12/03/2021 (US)      6  
02/11/2022 (US)      6  
02/18/2022 (US)      5  
09/10/2021 (US)      5  
04/23/2021 (US)      5  
Name: Movie Release, dtype: int64
```

In [27]:

```

1 #top 20 movie ratings, Names and Genre
2 top_20 = movie_Data.nlargest(20,'Movie Ratings')[['Movie Name','Movie Ratings','Movie Genre']].set_index('Movie Name')
3 top_20

```

Out[27]:

Movie Name	Movie Ratings	Movie Genre
<b>Virus:32</b>	100.0	Horror
<b>The Three Deaths of Marisela Escobedo</b>	91.0	Documentary, Crime
<b>Mission «Sky»</b>	90.0	Drama, War
<b>Everything Everywhere All at Once</b>	88.0	Action, Science Fiction, Comedy
<b>Demon Slayer: Kimetsu no Yaiba Sibling's Bond</b>	88.0	Action, Animation, Fantasy
<b>Ni tuyó, Ni míá</b>	88.0	Drama
<b>The Shawshank Redemption</b>	87.0	Drama, Crime
<b>The Godfather</b>	87.0	Drama, Crime
<b>Polar Bear</b>	87.0	Documentary
<b>K.G.F: Chapter 2</b>	86.0	Action, Drama
<b>The Godfather: Part II</b>	86.0	Drama, Crime
<b>Schindler's List</b>	86.0	Drama, History, War
<b>Impossible Things</b>	86.0	Family, Drama
<b>Josee, the Tiger and the Fish</b>	86.0	Animation, Drama, Romance
<b>Violet Evergarden: The Movie</b>	86.0	Animation, Fantasy, Romance, Drama
<b>Your Name.</b>	85.0	Romance, Animation, Drama
<b>Evangelion: 3.0+1.0 Thrice Upon a Time</b>	85.0	Animation, Action, Science Fiction, Drama
<b>Given</b>	85.0	Animation, Drama, Music, Romance
<b>Rascal Does Not Dream of a Dreaming Girl</b>	85.0	Animation, Comedy, Romance, Drama, Fantasy
<b>The Green Mile</b>	85.0	Fantasy, Drama, Crime

In [42]:

```
1 def rating(rating):
2     if rating>=80.0:
3         return "Excellent"
4     elif rating>=60.0:
5         return "Good"
6     else:
7         return "avarage"
8
```

In [43]:

```
1 movie_Data['rating_cato']=movie_Data["Movie Ratings"].apply(rating)
```

In [44]:

```

1 #Rating categories
2 movie_Data

```

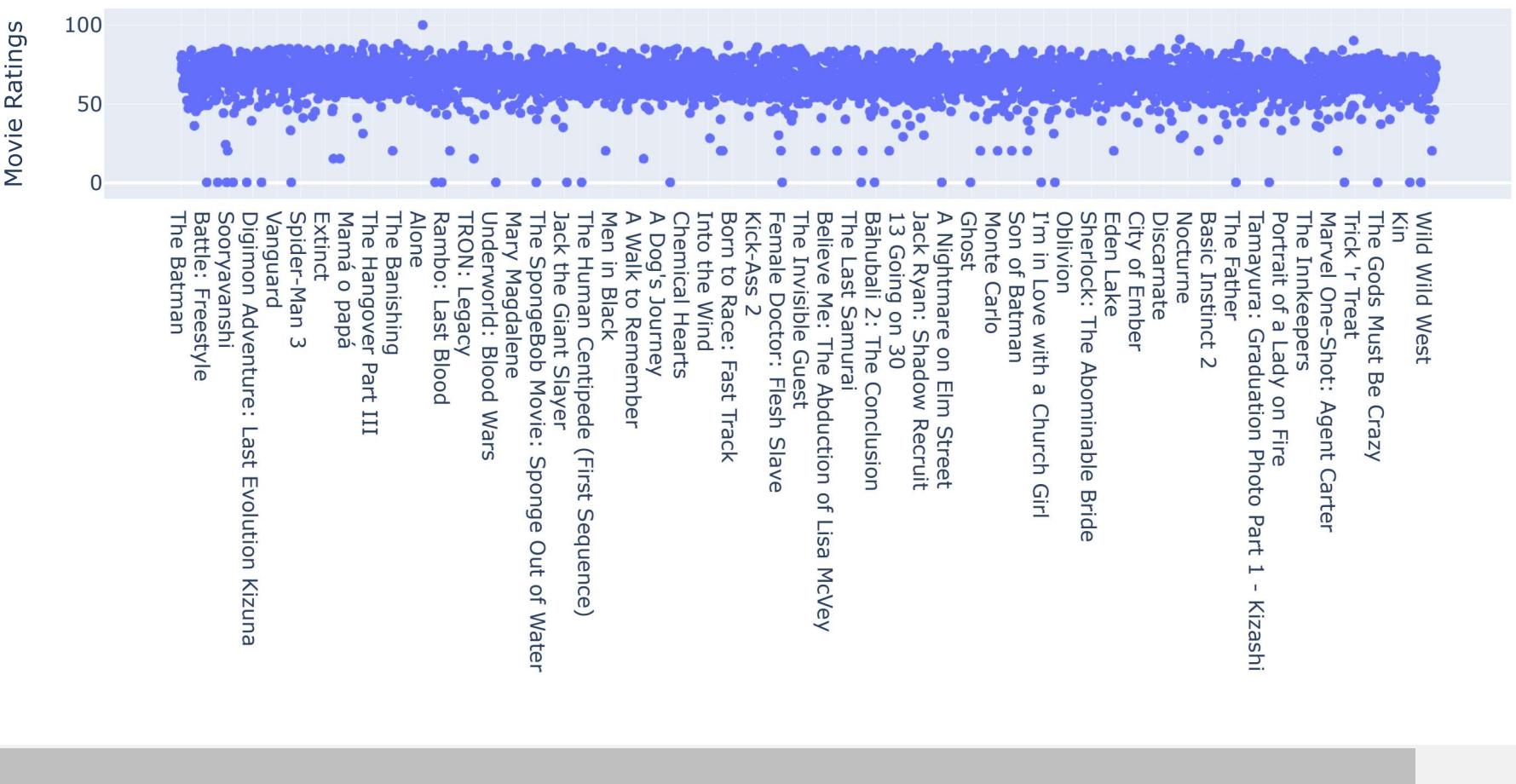
Out[44]:

	Movie Name	Movie Ratings	Movie Link	Movie Genre	Movie Release	Movie Runtime	Movie Dir	rating_cato
0	The Batman	79.0	https://www.themoviedb.org//movie/414906	Crime, Mystery, Thriller	03/04/2022	2h 56m	Matt Reeves	Good
1	The Outfit	72.0	https://www.themoviedb.org//movie/799876	Drama, Thriller, Crime	03/18/2022 (US)	1h 45m	Graham Moore	Good
2	Spider-Man: No Way Home	81.0	https://www.themoviedb.org//movie/634649	Action, Adventure, Science Fiction	12/17/2021	2h 28m	Stan Lee	Excellent
3	Turning Red	75.0	https://www.themoviedb.org//movie/508947	Animation, Family, Comedy, Fantasy	03/10/2022 (CZ)	1h 40m	Domee Shi	Good
4	Sonic the Hedgehog 2	77.0	https://www.themoviedb.org//movie/675353	Action, Science Fiction, Comedy, Family	04/08/2022 (US)	2h 2m	Patrick Casey	Good
...	...	...	...	...	...	...	...	...
3995	The Jurassic Games	46.0	https://www.themoviedb.org//movie/504982	Science Fiction, Action, Horror	05/21/2018 (US)	1h 26m	Ryan Bellgardt	average
3996	Bad Luck Banging or Loony Porn	65.0	https://www.themoviedb.org//movie/790496	Comedy, Drama	11/26/2021 (RO)	1h 46m	Radu Jude	Good
3997	Winnie the Pooh: Springtime with Roo	66.0	https://www.themoviedb.org//movie/16394	Family, Animation	03/09/2004 (US)	1h 5m	A. A. Milne	Good
3998	Midnight in Paris	75.0	https://www.themoviedb.org//movie/59436	Fantasy, Comedy, Romance	05/20/2011 (US)	1h 34m	Woody Allen	Good
3999	Driving Miss Daisy	73.0	https://www.themoviedb.org//movie/403	Drama	01/26/1990 (US)	1h 39m	Alfred Uhry	Good

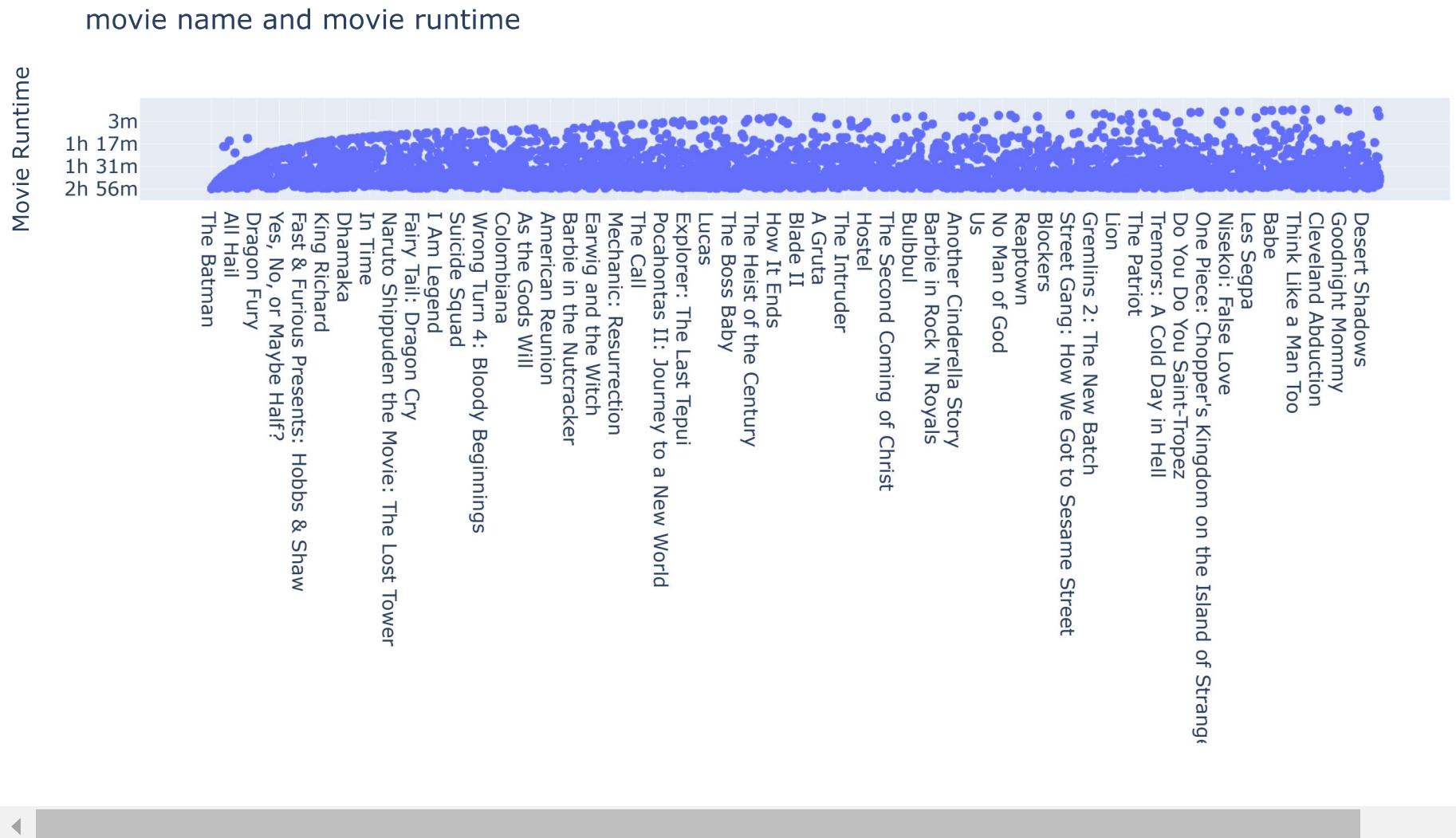
4000 rows × 8 columns

```
In [28]: 1 px.scatter(x='Movie Name',y='Movie Ratings',data_frame=movie_Data,title='movie name and movie ratings')
```

movie name and movie ratings



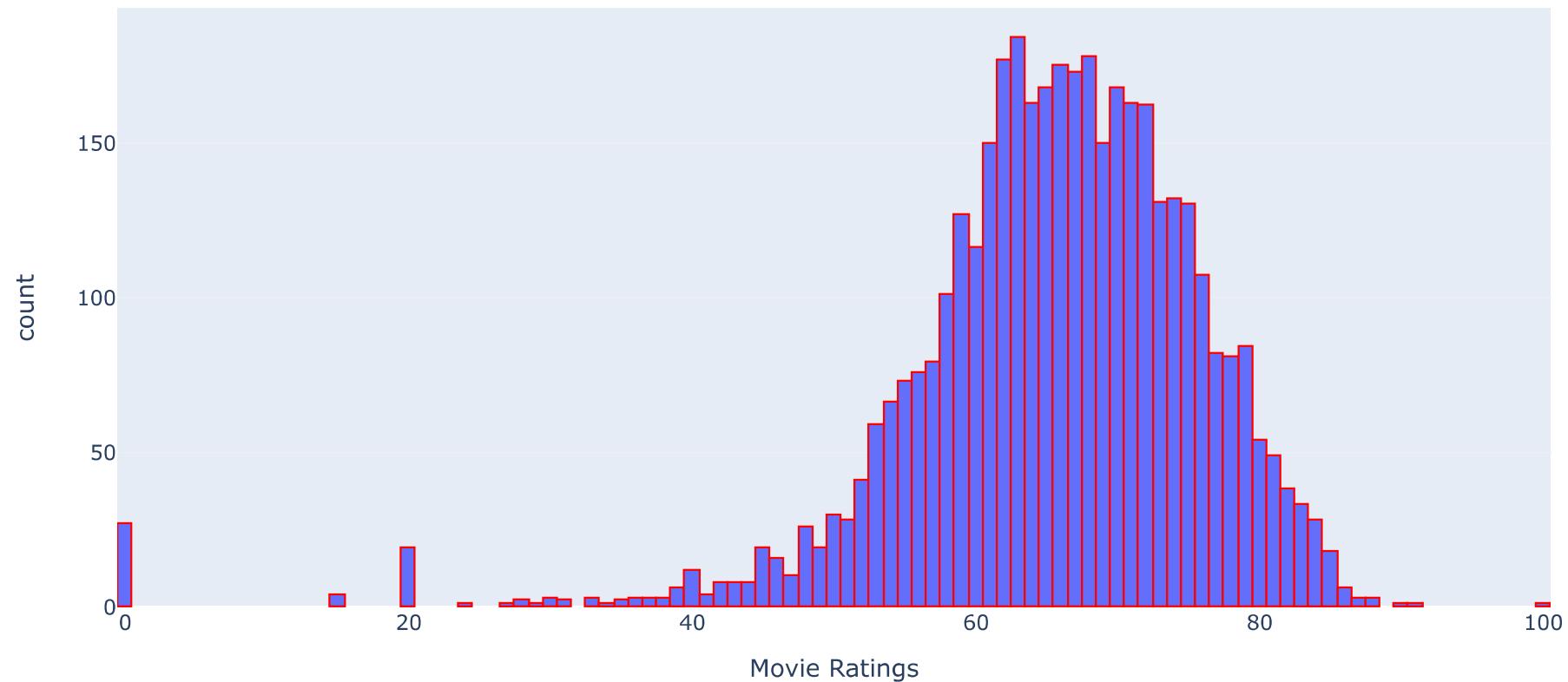
```
In [29]: 1 px.scatter(x='Movie Name',y='Movie Runtime',data_frame=movie_Data,title='movie name and movie runtime')
```



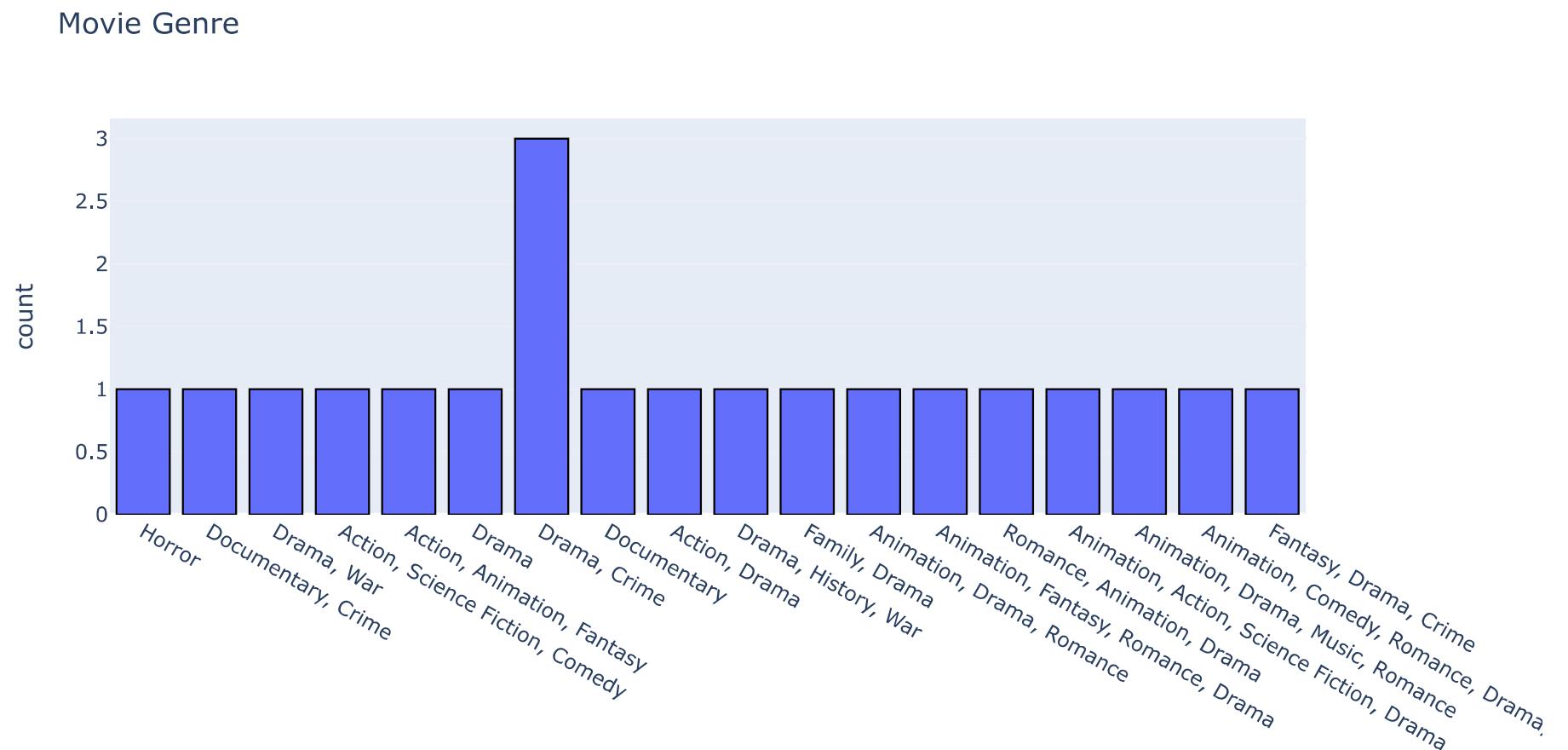
In [30]:

```
1 fig = px.histogram(x='Movie Ratings',data_frame=movie_Data,title='Movie Ratings')
2 fig.update_traces(marker_line_width=1,marker_line_color='red')
3
```

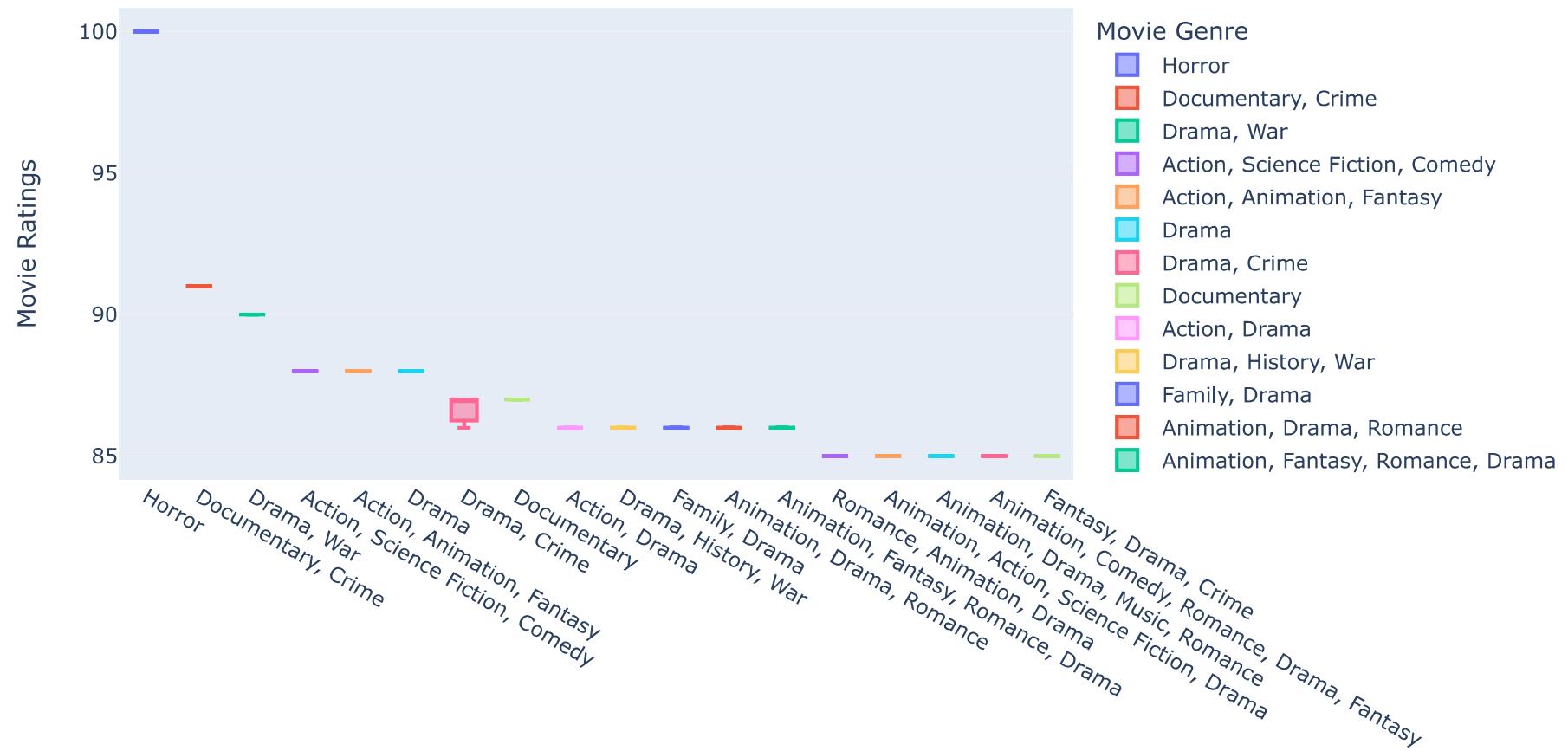
Movie Ratings



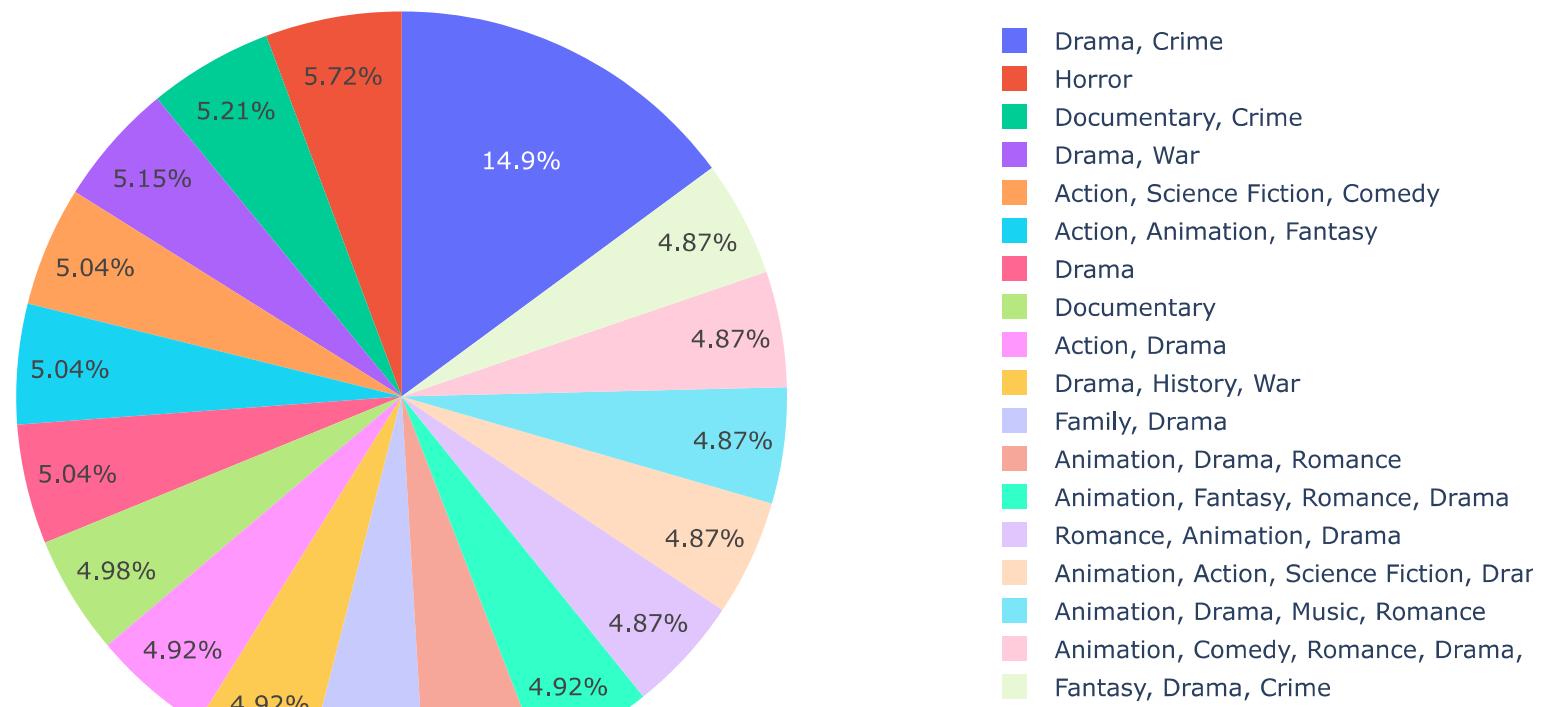
```
In [31]: 1 fig = px.histogram(x='Movie Genre',data_frame=top_20,title='Movie Genre')
          2 fig.update_traces(marker_line_width=1,marker_line_color='black')
```



```
In [32]: 1 px.box(x='Movie Genre',y='Movie Ratings',data_frame=top_20,color='Movie Genre')
```



```
In [33]: 1 px.pie(names='Movie Genre',values='Movie Ratings',data_frame=top_20)
```



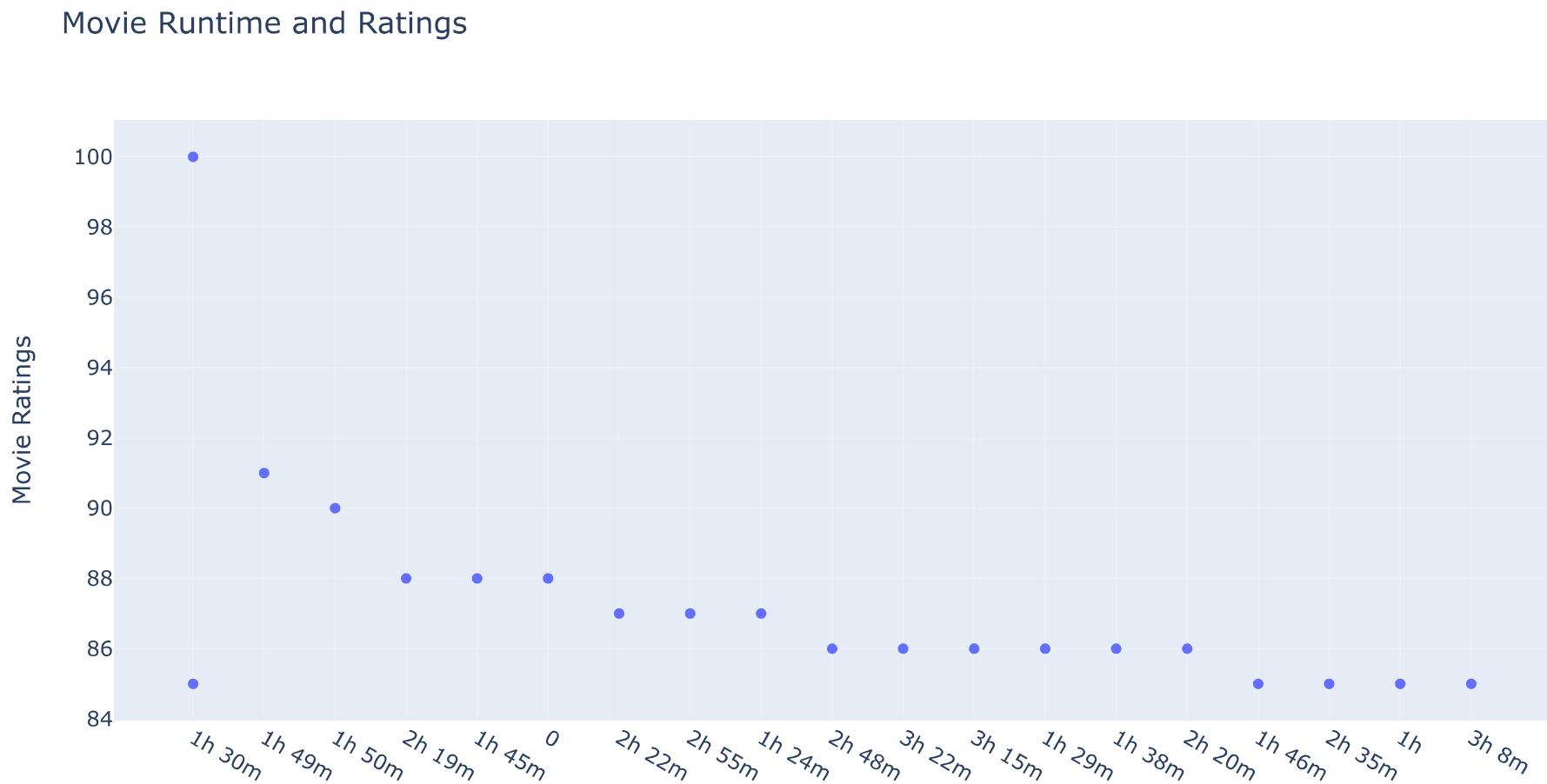
```
In [34]: 1 data_genre = movie_Data.nlargest(20,'Movie Ratings')[['Movie Name','Movie Ratings','Movie Genre','Movie Runtime']]
```

In [35]: 1 | data\_genre

Out[35]:

		Movie Name	Movie Ratings	Movie Genre	Movie Runtime
760		Virus:32	100.0	Horror	1h 30m
3182	The Three Deaths of Marisela Escobedo		91.0	Documentary, Crime	1h 49m
3739	Mission «Sky»		90.0	Drama, War	1h 50m
573	Everything Everywhere All at Once		88.0	Action, Science Fiction, Comedy	2h 19m
681	Demon Slayer: Kimetsu no Yaiba Sibling's Bond		88.0	Action, Animation, Fantasy	1h 45m
3375	Ni tuyo, Ni mía		88.0	Drama	0
889	The Shawshank Redemption		87.0	Drama, Crime	2h 22m
1030	The Godfather		87.0	Drama, Crime	2h 55m
1726	Polar Bear		87.0	Documentary	1h 24m
1229	K.G.F: Chapter 2		86.0	Action, Drama	2h 48m
1326	The Godfather: Part II		86.0	Drama, Crime	3h 22m
1821	Schindler's List		86.0	Drama, History, War	3h 15m
2399	Impossible Things		86.0	Family, Drama	1h 29m
3217	Josee, the Tiger and the Fish		86.0	Animation, Drama, Romance	1h 38m
3372	Violet Evergarden: The Movie		86.0	Animation, Fantasy, Romance, Drama	2h 20m
131	Your Name.		85.0	Romance, Animation, Drama	1h 46m
314	Evangelion: 3.0+1.0 Thrice Upon a Time		85.0	Animation, Action, Science Fiction, Drama	2h 35m
339	Given		85.0	Animation, Drama, Music, Romance	1h
368	Rascal Does Not Dream of a Dreaming Girl		85.0	Animation, Comedy, Romance, Drama, Fantasy	1h 30m
468	The Green Mile		85.0	Fantasy, Drama, Crime	3h 8m

```
In [36]: 1 px.scatter(x='Movie Runtime',y='Movie Ratings',title='Movie Runtime and Ratings',data_frame=data_genre)
```



```
In [ ]: 1
```

