In [1]:
```python
import requests
import pandas as pd
import bs4
import json
url = 'https://www.imdb.com/search/title/?count=100&groups=top_1000&sort=user_rat
res = requests.get(url)
res
```

Out[1]: <Response [200]>

In [2]:
```python
res
```

Out[2]: <Response [200]>

In [3]:
```python
data = bs4.BeautifulSoup(res.text,'html')
```

In [4]:
```python
url1='https://www.imdb.com/title/tt{}/'.format(str(2322441).zfill(7))
res1 = requests.get(url1)
res1.text
res1
```

Out[4]: <Response [200]>

In [5]:
```python
data1 = bs4.BeautifulSoup(res1.text,'html')
```

In [6]:
```python
url1
```

Out[6]: 'https://www.imdb.com/title/tt2322441/'

In [7]:
```python
data1.find('script',attrs={'type':'application/ld+json'})
```

Out[7]:
<script type="application/ld+json">{"@context":"https://schema.org","@type":"Movie","url":"/title/tt2322441/","name":"Fifty Shades of Grey","image":"https://m.media-amazon.com/images/M/MV5BMjE1MTM4NDAzOF5BMl5BanBnXkFtZTgwNTMwNjI0MzE@._V1_.jpg","contentRating":"(Banned)","genre":["Drama","Romance","Thriller"],"actor":[{"@type":"Person","url":"/name/nm0424848/","name":"Dakota Johnson"},{"@type":"Person","url":"/name/nm1946193/","name":"Jamie Dornan"},{"@type":"Person","url":"/name/nm0000383/","name":"Jennifer Ehle"}],"director":[{"@type":"Person","url":"/name/nm0853374/","name":"Sam Taylor-Johnson"}],"creator":[{"@type":"Organization","url":"/company/co0042399/"},{"@type":"Organization","url":"/company/co0174505/"},{"@type":"Organization","url":"/company/co0148949/"},{"@type":"Person","url":"/name/nm0545150/","name":"Kelly Marcel"},{"@type":"Person","url":"/name/nm1093317/","name":"E.L. James"}],"trailer":{"@type":"VideoObject","name":"Trailer","embedUrl":"/video/imdb/vi2636688921","thumbnail":{"@type":"ImageObject","contentUrl":"https://m.media-amazon.com/images/M/MV5BMjgzMTA4MzUyNl5BMl5BanBnXkFtZTgwMDAyMzIzNDE@._V1_.jpg"},"thumbnailUrl":"https://m.media-amazon.com/images/M/MV5BMjgzMTA4MzUyNl5BMl5BanBnXkFtZTgwMDAyMzIzNDE@._V1_.jpg","description":"Watch a trailer for Fifty Shades of Grey."},"datePublished":"2015-02-14","description":"Literature student Anastasia Steele's life changes forever when she meets handsome, yet tormented, billionaire Christian Grey.","keywords":"female nudity,female frontal nudity,spanking,sex scene,bare breasts","review":{"@type":"Review","itemReviewed":{"@type":"CreativeWork","url":"/title/tt2322441/"},"author":{"@type":"Person","name":"gangstah_vino"},"dateCreated":"2015-02-10","inLanguage":"English","name":"My god.. this was awful","reviewBody":"I don't want to spoil a lot, so ill just give ratings with a brief description on certain elements of this so-called "film".\n\nActing; 3/10. The acting was misplaced, awkward.. not to look at. At least convince us you're an intense guy, Mr. Grey. \n\nPlot: 1/10. that wasn't a plot for a normal movie, it was a plot for soft-core porn.. which had as terrible acting in it as real porn. \n\nCamera work/scenery/etc. 7/10 for what it is.. great camera work i guess and good scenery\n\nRomance; 2/10. I've seen the notebook... that's romance. This is a poor attempt to romance. It tries to tell you they're madly in love, but it's just a weird sexual relationship.\n\nDrama: 1/10. there is no thrill.. no intense things going on. There is no drama in this soft-core-erotic-drama. \n\n"The deeds" 10/10.. they did it. so.. can't give it any lower points than this. \n\nOverall, it's was horrible acted, plot-less, non-romantic nor drama movie about a girl being horny and the guy doing an attempt of BDSM, which comes down to.. soft-core.. almost nothing different than normal sex with bondage.. boring sh*t. \n\non that note, go watch the kings man; secret service. that's one of the best action movies i've seen in a while!","reviewRating":{"@type":"Rating","worstRating":1,"bestRating":10,"ratingValue":1}},"aggregateRating":{"@type":"AggregateRating","ratingCount":302655,"bestRating":10,"worstRating":1,"ratingValue":4.1},"duration":"PT2H5M"}</script>

In [8]:
```python
def get_id(num):
    data=pd.read_csv(r'C:\Users\raj20\Downloads\WAC-DataScience-master\WAC-DataS(
    start=0
    end=start+num
    movies=list(data['imdbId'])
    return movies[start:end]
```

In [9]:
```python
ids=get_id(5)
ids
for i in ids:
    print(i)
```

```
114709
113497
113228
114885
113041
```

In [10]:
```python
print(ids)
```

```
[114709, 113497, 113228, 114885, 113041]
```

In [11]:
```python
def scrape_id(movie_id):
    url1='https://www.imdb.com/title/tt{}/'.format(str(movie_id).zfill(7))
    res1 = requests.get(url1)
    res1.text

    data1 = bs4.BeautifulSoup(res1.text,'html')
    current_page=data1.find('script',attrs={'type':'application/ld+json'})

    current_page = str(current_page)[str(current_page).find('{'):-9]
    return current_page
```

In [12]:
```python
ids=get_id(10)
ptr=scrape_id(ids[6])
```

In [13]:
```python
def collect_movie_data(movie_id):
    movie_data=scrape_id(movie_id)
    movie_data=json.loads(movie_data)
    #print(movie_data['aggregateRating']['ratingValue'])
    #print(movie_data)
    movie={
        'movie_name':movie_data['name'],
        'movie_genre': movie_data['genre'],
        'movie_rating': movie_data['aggregateRating']['ratingValue']

    }
    return movie
```

In [14]: `ptr`

Out[14]:

'{"@context":"https://schema.org","@type":"Movie","url":"/title/tt0114319/","name":"Sabrina","image":"https://m.media-amazon.com/images/M/MV5BYjQ5ZjQ0YzQtOGY3My00MWVhLTgzNWItOTYwMTE5N2ZiMDUyXkEyXkFqcGdeQXVyNjUwMzI2NzU@._V1_.jpg","contentRating":"PG","genre":["Comedy","Drama","Romance"],"actor":[{"@type":"Person","url":"/name/nm0000148/","name":"Harrison Ford"},{"@type":"Person","url":"/name/nm0000566/","name":"Julia Ormond"},{"@type":"Person","url":"/name/nm0001427/","name":"Greg Kinnear"}],"director":[{"@type":"Person","url":"/name/nm0001628/","name":"Sydney Pollack"}],"creator":[{"@type":"Organization","url":"/company/co0078545/"},{"@type":"Organization","url":"/company/co0038270/"},{"@type":"Organization","url":"/company/co0047147/"},{"@type":"Person","url":"/name/nm0853138/","name":"Samuel A. Taylor"},{"@type":"Person","url":"/name/nm0000697/","name":"Billy Wilder"},{"@type":"Person","url":"/name/nm0499626/","name":"Ernest Lehman"}],"trailer":{"@type":"VideoObject","name":"Sabrina","embedUrl":"/video/imdb/vi544257049","thumbnail":{"@type":"ImageObject","contentUrl":"https://m.media-amazon.com/images/M/MV5BNTBkN2EyNjctNDQwMS00MmU4LWJiZjEtMWRlNGY5ZGJjOTA3XkEyXkFqcGdeQXVyNzU1NzE3NTg@._V1_.jpg"},"thumbnailUrl":"https://m.media-amazon.com/images/M/MV5BNTBkN2EyNjctNDQwMS00MmU4LWJiZjEtMWRlNGY5ZGJjOTA3XkEyXkFqcGdeQXVyNzU1NzE3NTg@._V1_.jpg","description":"Trailer"},"datePublished":"1995-12-15","description":"An ugly duckling having undergone a remarkable change, still harbors feelings for her crush: a carefree playboy, but not before his business-focused brother has something to say about it.","keywords":"character name as title,automobile,british car,bentley motor vehicle,bentley the car","review":{"@type":"Review","itemReviewed":{"@type":"CreativeWork","url":"/title/tt0114319/"},"author":{"@type":"Person","name":"mrsweeneytodd"},"dateCreated":"2000-04-23","inLanguage":"English","name":"Please...","reviewBody":"Many critiques on this site suppose that it is somehow superior to the original. I am not sure how this can hold up. While Harrison Ford and Greg Kinnear are fine actors in their own right, comparing them to the coupling of Bogart and Holden is ridiculous. Just because a movie is OLD does not make it better, but if it is impeccably filmed and acted superbly, what is the point in redoing it to inferior standards? I suggest that the state of movie-making has in fact declined, as the art form has given way to popular sentiment, over-the-top portrayals of characters, and remakes which attempt to market themselves on previous successful attempts. To say that someone who repainted a Michaelangelo has made it somewhat made it better because painting has "evolved" is equally as stupid as saying any remake improves. And while Audrey Hepburn is not the world's finest actress, she has a unique cinematic quality which cannot be imitated or reproduced, much like her co-stars in this film. Please Hollywood, stop reproducing classics simply because there is a drought of originality and screenplays. Try rereleasing these classics so the public can see movies as they were meant to be viewed."},"aggregateRating":{"@type":"AggregateRating","ratingCount":37693,"bestRating":10,"worstRating":1,"ratingValue":6.3},"duration":"PT2H7M"}'

In [15]: `print(ptr)`

{"@context":"https://schema.org","@type":"Movie","url":"/title/tt0114319/","name":"Sabrina","image":"https://m.media-amazon.com/images/M/MV5BYjQ5ZjQ0YzQtOGY3My00MWVhLTgzNWItOTYwMTE5N2ZiMDUyXkEyXkFqcGdeQXVyNjUwMzI2NzU@._V1_.jpg","contentRating":"PG","genre":["Comedy","Drama","Romance"],"actor":[{"@type":"Person","url":"/name/nm0000148/","name":"Harrison Ford"},{"@type":"Person","url":"/name/nm0000566/","name":"Julia Ormond"},{"@type":"Person","url":"/name/nm0001427/","name":"Greg Kinnear"}],"director":[{"@type":"Person","url":"/name/nm0001628/","name":"Sydney Pollack"}],"creator":[{"@type":"Organization","url":"/company/co0078545/"},{"@type":"Organization","url":"/company/co0038270/"},{"@type":"Organization","url":"/company/co0047147/"},{"@type":"Person","url":"/name/nm0853138/","name":"Samuel A. Taylor"},{"@type":"Person","url":"/name/nm0000697/","name":"Billy Wilder"},{"@type":"Person","url":"/name/nm0499626/","name":"Ernest Lehman"}],"trailer":{"@type":"VideoObject","name":"Sabrina","embedUrl":"/video/imdb/vi544257049","thumbnail":{"@type":"ImageObject","contentUrl":"https://m.media-amazon.com/images/M/MV5BNTBkN2EyNjctNDQwMS00MmU4LWJiZjEtMWRlNGY5ZGJjOTA3XkEyXkFqcGdeQXVyNzU1NzE3NTg@._V1_.jpg"},"thumbnailUrl":"https://m.media-amazon.com/images/M/MV5BNTBkN2EyNjctNDQwMS00MmU4LWJiZjEtMWRlNGY5ZGJjOTA3XkEyXkFqcGdeQXVyNzU1NzE3NTg@._V1_.jpg","description":"Trailer"},"datePublished":"1995-12-15","description":"An ugly duckling having undergone a remarkable change, still harbors feelings for her crush: a carefree playboy, but not before his business-focused brother has something to say about it.","keywords":"character name as title,automobile,british car,bentley motor vehicle,bentley the car","review":{"@type":"Review","itemReviewed":{"@type":"CreativeWork","url":"/title/tt0114319/"},"author":{"@type":"Person","name":"mrsweeneytodd"},"dateCreated":"2000-04-23","inLanguage":"English","name":"Please...","reviewBody":"Many critiques on this site suppose that it is somehow superior to the original. I am not sure how this can hold up. While Harrison Ford and Greg Kinnear are fine actors in their own right, comparing them to the coupling of Bogart and Holden is ridiculous. Just because a movie is OLD does not make it better, but if it is impeccably filmed and acted superbly, what is the point in redoing it to inferior standards? I suggest that the state of movie-making has in fact declined, as the art form has given way to popular sentiment, over-the-top portrayals of characters, and remakes which attempt to market themselves on previous successful attempts. To say that someone who repainted a Michaelangelo has made it somewhat made it better because painting has "evolved" is equally as stupid as saying any remake improves. And while Audrey Hepburn is not the world's finest actress, she has a unique cinematic quality which cannot be imitated or reproduced, much like her co-stars in this film. Please Hollywood, stop reproducing classics simply because there is a drought of originality and screenplays. Try rereleasing these classics so the public can see movies as they were meant to be viewed."},"aggregateRating":{"@type":"AggregateRating","ratingCount":37693,"bestRating":10,"worstRating":1,"ratingValue":6.3},"duration":"PT2H7M"}

In [16]:
```python
ids=get_id(5)
t=[]
for i in ids:
    t.append(collect_movie_data(i))
print(t)
```

```
[{'movie_name': 'Toy Story', 'movie_genre': ['Animation', 'Adventure', 'Comed
y'], 'movie_rating': 8.3}, {'movie_name': 'Jumanji', 'movie_genre': ['Adventur
e', 'Comedy', 'Family'], 'movie_rating': 7}, {'movie_name': 'Grumpier Old Men',
'movie_genre': ['Comedy', 'Romance'], 'movie_rating': 6.7}, {'movie_name': 'Wai
ting to Exhale', 'movie_genre': ['Comedy', 'Drama', 'Romance'], 'movie_rating':
5.9}, {'movie_name': 'Father of the Bride Part II', 'movie_genre': ['Comedy',
'Family', 'Romance'], 'movie_rating': 6.1}]
```

In [17]:
```python
ids=get_id(20)
t=[]
rating=[]
for i in ids:
    x=(collect_movie_data(i))
    t.append(x['movie_name'])
    rating.append(float(x['movie_rating']))
```
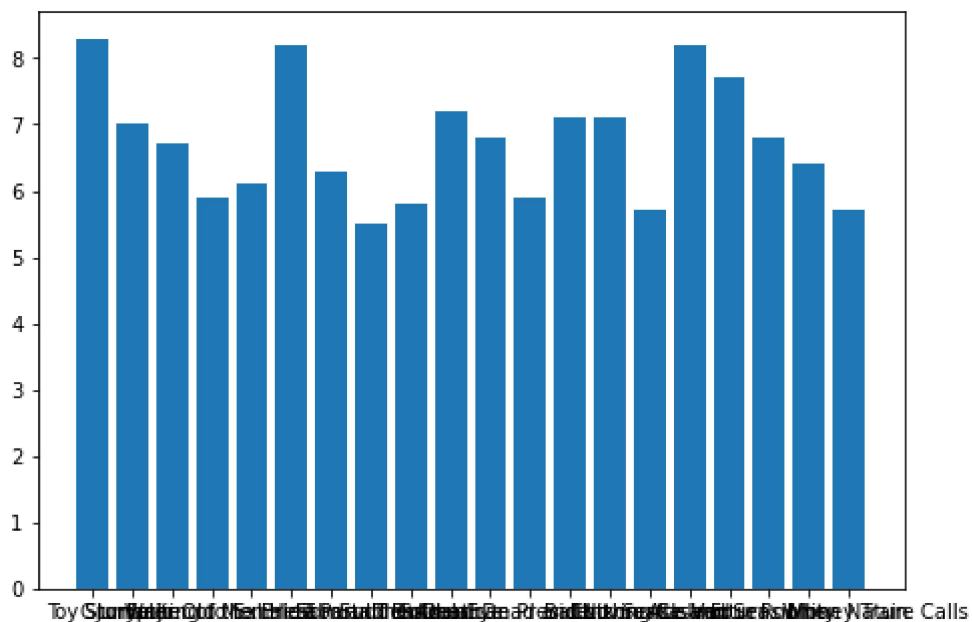
In [18]:
```python
t
```

Out[18]:
```
['Toy Story',
 'Jumanji',
 'Grumpier Old Men',
 'Waiting to Exhale',
 'Father of the Bride Part II',
 'Heat',
 'Sabrina',
 'Tom and Huck',
 'Sudden Death',
 'GoldenEye',
 'The American President',
 'Dracula: Dead and Loving It',
 'Balto',
 'Nixon',
 'Cutthroat Island',
 'Casino',
 'Sense and Sensibility',
 'Four Rooms',
 'Ace Ventura: When Nature Calls',
 'Money Train']
```

In [19]: `rating`

Out[19]:
```
[8.3,
 7.0,
 6.7,
 5.9,
 6.1,
 8.2,
 6.3,
 5.5,
 5.8,
 7.2,
 6.8,
 5.9,
 7.1,
 7.1,
 5.7,
 8.2,
 7.7,
 6.8,
 6.4,
 5.7]
```

In [20]:
```python
import matplotlib.pyplot as plt
fig = plt.figure()
ax=fig.add_axes([0,0,1,1])
ax.bar(t,rating)
```

Out[20]: `<BarContainer object of 20 artists>`

In [21]:
```python
df1=pd.DataFrame({'name':t,'rating':rating})
df1
```

Out[21]:

	name	rating
0	Toy Story	8.3
1	Jumanji	7.0
2	Grumpier Old Men	6.7
3	Waiting to Exhale	5.9
4	Father of the Bride Part II	6.1
5	Heat	8.2
6	Sabrina	6.3
7	Tom and Huck	5.5
8	Sudden Death	5.8
9	GoldenEye	7.2
10	The American President	6.8
11	Dracula: Dead and Loving It	5.9
12	Balto	7.1
13	Nixon	7.1
14	Cutthroat Island	5.7
15	Casino	8.2
16	Sense and Sensibility	7.7
17	Four Rooms	6.8
18	Ace Ventura: When Nature Calls	6.4
19	Money Train	5.7

In [22]: `df1.plot(kind='bar',x='name',y='rating')`

Out[22]: `<AxesSubplot:xlabel='name'>`