```python
import pandas as pd
import requests
```


Use your own API Read Access Token in the code below

```python
import requests

url = "https://api.themoviedb.org/3/movie/top_rated?language=en-US&page=1"

headers = {
    "accept": "application/json",
    "Authorization": "Bearer {Your API Read Access token}"
}
```

```
response = requests.get(url, headers=headers)

print(response.json())
```

```
{'page': 1, 'results': [{'adult': False, 'backdrop_path': '/zfbjgQE1uSd9wiPTX4VzsLi0rGG.jpg', 'genre_
```

Page 1 (First page): JSON response from API

Page 492 (Last Page): JSON response from API

Page 493: No data or results

api.themoviedb.org/3/movie/top_rated?api_key=b17e9████████████d&language=en-US&page=493

Pretty print ☐

{"page":493,"results":[],"total_pages":492,"total_results":9824}

jsonviewer.stack.hu

| Viewer | Text |

Paste Copy | Format Remove white space | Clear | Load JSON data   About

{"page":1,"results":[{"adult":false,"backdrop_path":"/zfbjgQE1uSd9wiPTX4VzsLi0rGG.jpg","genre_ids":[18,80],"id":278,"original_language":"en","original_title":"The Shawshank Redemption","overview":"Imprisoned in the 1940s for the double murder of his wife and her lover, upstanding banker Andy Dufresne begins a new life at the Shawshank prison, where he puts his accounting skills to work for an amoral warden. During his long stretch in prison, Dufresne comes to be admired by the other inmates -- including an older prisoner named Red -- for his integrity and unquenchable sense of hope.","popularity":157.014,"poster_path":"/9cqNxx0GxF0bflZmeSMuL5tnGzr.jpg","release_date":"1994-09-23","title":"The Shawshank Redemption","video":false,"vote_average":8.708,"vote_count":27325},{"adult":false,"backdrop_path":"/tmU7GeKVybMWFButWEG12M4GeiP.jpg","genre_ids":[18,80],"id":238,"original_language":"en","original_title":"The Godfather","overview":"Spanning the years 1945 to 1955, a chronicle of the fictional Italian-American Corleone crime family. When organized crime family patriarch, Vito Corleone barely survives an attempt on his life, his youngest son, Michael steps in to take care of the would-be killers, launching a campaign of bloody revenge.","popularity":155.451,"poster_path":"/3bhkrj58Vtu7enYsRolD1fZdja1.jpg","release_date":"1972-03-14","title":"The Godfather","video":false,"vote_average":8.69,"vote_count":20737},{"adult":false,"backdrop_path":"/kGzFbGhp99zva6oZODW5atUtnqi.jpg","genre_ids":[18,80],"id":240,"original_language":"en","original_title":"The Godfather Part II","overview":"In the continuing saga of the Corleone crime family, a young Vito Corleone grows up in Sicily and in 1910s New York. In the 1950s, Michael Corleone attempts to expand the family business into Las Vegas, Hollywood and Cuba.","popularity":87.158,"poster_path":"/hek3koDUyRQk7FIhPXsa6mT2Zc3.jpg","release_date":"1974-12-20","title":"The Godfather Part II","video":false,"vote_average":8.6,"vote_count":12510},{"adult":false,"backdrop_path":"/zb6fM1CX41D9rF9hdgclu0peUmy.jpg","genre_ids":[18,36,10752],"id":424,"original_language":"en","original_title":"Schindler's List","overview":"The true story of how businessman Oskar Schindler saved over a thousand Jewish lives from the Nazis while they worked as slaves in his factory during World War II.","popularity":89.846,"poster_path":"/sF1U4EUQS8YHUYjN13pMGNIQyr0.jpg","release_date":"1993-12-15","title":"Schindler's List","video":false,"vote_average":8.567,"vote_count":15926},{"adult":false,"backdrop_path":"/bxgTSUenZDHNFerQ1whRKplrMKF.jpg","genre_ids":[18],"id":389,"original_language":"en","original_title":"12 Angry Men","overview":"The defense and the prosecution have rested and the jury is filing into the jury room to decide if a young Spanish-American is guilty or innocent of murdering his father. What begins as an open and shut case soon becomes a mini-drama of each of the jurors' prejudices and preconceptions about the trial, the accused, and each other.","popularity":60.134,"poster_path":"/ow3wq89wM8qd5X7hWKxiRfsFF9C.jpg","release_date":"1957-04-10","title":"12 Angry Men","video":false,"vote_average":8.5,"vote_count":8723},{"adult":false,"backdrop_path":"/m4TUa2ciEWSlk37rOsjiSIvZDXE.jpg","genre_ids":[16,10751,14],"id":129,"original_language":"ja","original_title":"千と千尋の神隠し","overview":"A young girl, Chihiro, becomes trapped in a strange new world of spirits. When her parents undergo a mysterious transformation, she must call upon the courage she never knew she had to free her family.","popularity":103.989,"poster_path":"/8i4s1mb3T3C0HHhSNR4nDMqRDgm.jpg","release_date":"2001-07-20","title":"Spirited Away","video":false,"vote_average":8.538,"vote_count":16591},{"adult":false,"backdrop_path":"/90ez6ArvpO8bvpyIngBuwXOqJm5.jpg","genre_ids":[35,18,10749],"id":19404,"original_language":"hi","original_title":"दिलवाले दुल्हनिया ले जायेंगे","overview":"Raj is a rich, carefree, happy-go-lucky second generation NRI. Simran is the daughter of Chaudhary Baldev Singh, who in spite of being an NRI is very strict about adherence to Indian values. Simran has left for India to be married to her childhood fiancé. Raj leaves for India with a mission at his hands, to claim his lady love under the noses of her whole family. Thus begins a saga.","popularity":40.482,"poster_path":"/lFRkUr7DYdH1dAqi3PwdQGBRBPM.jpg","release_date":"1995-10-20","title":"Dilwale Dulhania Le Jayenge","video":false,"vote_average":8.5,"vote_count":4446},{"adult":false,"backdrop_path":"/oOv2oUXcAaNXakRqUPxYq51JURz.jpg","genre_ids":[18,28,80,53],"id":155,"original_language":"en","original_title":"The Dark Knight","overview":"Batman raises the stakes in his war on crime. With the help of Lt. Jim Gordon and District Attorney Harvey Dent, Batman sets out to dismantle the remaining criminal organizations that plague the streets. The partnership proves to be effective, but they soon find themselves prey to a reign of chaos unleashed by a rising criminal mastermind known to the terrified citizens of Gotham as the Joker.","popularity":134.567,"poster_path":"/qJ2tW6WMUDux911r6m7haRef0WH.jpg","release_date":"2008-07-16","title":"The Dark Knight","video":false,"vote_average":8.5,"vote_count":33025},{"adult":false,"backdrop_path":"/vxJ08SvwomfKbpboCWynC3uqUg4.jpg","genre_ids":

⌄   Online JSON viewer

jsonviewer.stack.hu

| Viewer | Text |

Name ▲	Value
⊟ {} JSON	
▪ page : 1	
⊟ [] results	
⊞ {} 0	
⊞ {} 1	
⊞ {} 2	
⊞ {} 3	
⊞ {} 4	
⊞ {} 5	
⊞ {} 6	
⊞ {} 7	
⊞ {} 8	
⊞ {} 9	
⊞ {} 10	
⊞ {} 11	
⊞ {} 12	
⊞ {} 13	
⊞ {} 14	
⊞ {} 15	
⊞ {} 16	
⊞ {} 17	
⊞ {} 18	
⊞ {} 19	
▪ total_pages : 492	
▪ total_results : 9824	

Name ▲	Value
adult	false
backdrop_path	"/kGzFbGhp99zva6oZO...
genre_ids	...
id	240
original_language	"en"
original_title	"The Godfather Part II"
overview	"In the continuing saga ...
popularity	87.158
poster_path	"/hek3koDUyRQk7FIhP...
release_date	"1974-12-20"
title	"The Godfather Part II"
video	false
vote_average	8.6
vote_count	12510

Search: [   ] GO! ⬇ Next ⬆ Previous

response

```
<Response [200]>
```

response.json()

```
species and must navigate the challenges of adapting to a transformed world together.',
  'popularity': 263.767,
  'poster_path': '/imKSymKBK7o73sajciEmndJoVkR.jpg',
  'release_date': '2024-08-29',
  'title': 'Flow',
  'video': False,
  'vote_average': 8.5,
  'vote_count': 414},
 {'adult': False,
  'backdrop_path': '/suaEOtk1N1sgg2MTM7oZd2cfVp3.jpg',
  'genre_ids': [53, 80],
  'id': 680,
  'original_language': 'en',
  'original_title': 'Pulp Fiction',
  'overview': "A burger-loving hit man, his philosophical partner, a drug-addled gangster's moll
and a washed-up boxer converge in this sprawling, comedic crime caper. Their adventures unfurl in
three stories that ingeniously trip back and forth in time.",
  'popularity': 110.962,
  'poster_path': '/vQWk5YBFWF4bZaofAbv0tShwBvQ.jpg',
  'release_date': '1994-09-10',
  'title': 'Pulp Fiction',
  'video': False,
  'vote_average': 8.487,
  'vote_count': 28018},
 {'adult': False,
  'backdrop_path': '/8x9iKH8kWA0zdkgNdpAew7OstYe.jpg',
  'genre_ids': [16, 10749, 18],
  'id': 372058,
  'original_language': 'ja',
  'original_title': '君の名は。',
  'overview': 'High schoolers Mitsuha and Taki are complete strangers living separate lives. But
one night, they suddenly switch places. Mitsuha wakes up in Taki's body, and he in hers. This
bizarre occurrence continues to happen randomly, and the two must adjust their lives around each
other.',
  'popularity': 86.106,
  'poster_path': '/vfJFJPepRKapMd5G2ro7klIRysq.jpg',
  'release_date': '2016-08-26',
  'title': 'Your Name.',
  'video': False,
  'vote_average': 8.5,
  'vote_count': 11431},
 {'adult': False,
  'backdrop_path': '/5JrZAtyk3LwiiAWLW0kwz41XZJC.jpg',
  'genre_ids': [12, 14, 28],
  'id': 122,
  'original_language': 'en',
  'original_title': 'The Lord of the Rings: The Return of the King',
  'overview': 'As armies mass for a final battle that will decide the fate of the world--and
powerful, ancient forces of Light and Dark compete to determine the outcome--one member of the
Fellowship of the Ring is revealed as the noble heir to the throne of the Kings of Men. Yet, the
sole hope for triumph over evil lies with a brave hobbit, Frodo, who, accompanied by his loyal
friend Sam and the hideous, wretched Gollum, ventures deep into the very dark heart of Mordor on
```

```python
response.json()['page']
```

```
1
```

```python
response.json()['results'][0]
```

```
{'adult': False,
 'backdrop_path': '/zfbjgQE1uSd9wiPTX4VzsLi0rGG.jpg',
 'genre_ids': [18, 80],
 'id': 278,
 'original_language': 'en',
 'original_title': 'The Shawshank Redemption',
 'overview': 'Imprisoned in the 1940s for the double murder of his wife and her lover, upstanding
banker Andy Dufresne begins a new life at the Shawshank prison, where he puts his accounting skills
to work for an amoral warden. During his long stretch in prison, Dufresne comes to be admired by the
other inmates -- including an older prisoner named Red -- for his integrity and unquenchable sense
```

```
    of hope.',
    'popularity': 157.014,
    'poster_path': '/9cqNxx0GxF0bflZmeSMuL5tnGzr.jpg',
    'release_date': '1994-09-23',
    'title': 'The Shawshank Redemption',
    'video': False,
    'vote_average': 8.708,
    'vote_count': 27325}
```

```python
print(response.json())
```

```
{'page': 1, 'results': [{'adult': False, 'backdrop_path': '/zfbjgQE1uSd9wiPTX4VzsLi0rGG.jpg', 'genre_
```

```python
print(response.json()['results'][0])
```

```
{'adult': False, 'backdrop_path': '/zfbjgQE1uSd9wiPTX4VzsLi0rGG.jpg', 'genre_ids': [18, 80], 'id': 27
```

```python
df1 = pd.DataFrame(response.json()['results'])
```

```python
df1
```

	adult	backdrop_path	genre_ids	id	original_language	original_title
0	False	/zfbjgQE1uSd9wiPTX4VzsLi0rGG.jpg	[18, 80]	278	en	The Shawshank Redemption
1	False	/tmU7GeKVybMWFButWEGl2M4GeiP.jpg	[18, 80]	238	en	The Godfather
2	False	/kGzFbGhp99zva6oZODW5atUtnqi.jpg	[18, 80]	240	en	The Godfather Part II
3	False	/zb6fM1CX41D9rF9hdgclu0peUmy.jpg	[18, 36, 10752]	424	en	Schindler's List
4	False	/bxgTSUenZDHNFerQ1whRKplrMKF.jpg	[18]	389	en	12 Angry Men
5	False	/m4TUa2ciEWSlk37rOsjiSIvZDXE.jpg	[16, 10751, 14]	129	ja	千と千尋の神隠し
6	False	/90ez6ArypO8byvylngBuwXQg_lm5.jpg	[35, 18,	19404	hi	दिलवाले दुल्हनिया

Next steps: [Generate code with `df1`]   [⬤ View recommended plots]   [New interactive sheet]

```
df2 = df1[['id','original_title','title','popularity','release_date','vote_average','vote_count']]
```

df2

	id	original_title	title	popularity	release_date	vote_average	vote_count
0	278	The Shawshank Redemption	The Shawshank Redemption	157.014	1994-09-23	8.708	27325
1	238	The Godfather	The Godfather	155.451	1972-03-14	8.690	20737
2	240	The Godfather Part II	The Godfather Part II	87.158	1974-12-20	8.600	12510
3	424	Schindler's List	Schindler's List	89.846	1993-12-15	8.567	15926
4	389	12 Angry Men	12 Angry Men	60.134	1957-04-10	8.500	8723
5	129	千と千尋の神隠し	Spirited Away	103.989	2001-07-20	8.538	16591
6	19404	दिलवाले दुल्हनिया ले जायेंगे	Dilwale Dulhania Le Jayenge	40.482	1995-10-20	8.500	4446
7	155	The Dark Knight	The Dark Knight	134.567	2008-07-16	8.500	33025
8	497	The Green Mile	The Green Mile	110.512	1999-12-10	8.500	17544
9	496243	기생충	Parasite	96.558	2019-05-30	8.505	18383
10	823219	Straume	Flow	263.767	2024-08-29	8.500	414
11	680	Pulp Fiction	Pulp Fiction	110.962	1994-09-10	8.487	28018
12	372058	君の名は。	Your Name.	86.106	2016-08-26	8.500	11431
13	122	The Lord of the Rings: The Return of the King	The Lord of the Rings: The Return of the King	128.131	2003-12-17	8.500	24323
14	13	Forrest Gump	Forrest Gump	99.977	1994-06-23	8.470	27536

Next steps: **Generate code with `df2`**   🔘 **View recommended plots**   **New interactive sheet**

```
df3 = pd.DataFrame(response.json()['results'])[['id','title']]
```

df3

	id	title
0	278	The Shawshank Redemption
1	238	The Godfather
2	240	The Godfather Part II
3	424	Schindler's List
4	389	12 Angry Men
5	129	Spirited Away
6	19404	Dilwale Dulhania Le Jayenge
7	155	The Dark Knight
8	497	The Green Mile
9	496243	Parasite
10	823219	Flow
11	680	Pulp Fiction
12	372058	Your Name.
13	122	The Lord of the Rings: The Return of the King
14	13	Forrest Gump
15	429	The Good, the Bad and the Ugly
16	346	Seven Samurai
17	12477	Grave of the Fireflies
18	769	GoodFellas
19	11216	Cinema Paradiso

Next steps: **Generate code with `df3`**   ⊙ **View recommended plots**   **New interactive sheet**

Creating a blank DataFrame 'df'

```
df=pd.DataFrame()
```

Total 492 pages with 9822 results

⌄ To get data from all 492 pages and storing them in a DataFrame 'df'

```python
for i in range(1,493):

    url = "https://api.themoviedb.org/3/movie/top_rated?language=en-US&page={}".format(i)

    headers = {
    "accept": "application/json",
    "Authorization": "Bearer eyJhbGciOiJIUzI1NiJ9.eyJhdWQiOiJiMTdlOTA0MmM3MWMyY2M5YzViZTc4ODQ2N2U2NzMzZCI
    }

    response = requests.get(url, headers=headers)
    temp_df = pd.DataFrame(response.json()['results'])[['id','original_title','title','popularity','relea
    df = pd.concat([df, temp_df], ignore_index=True)
```
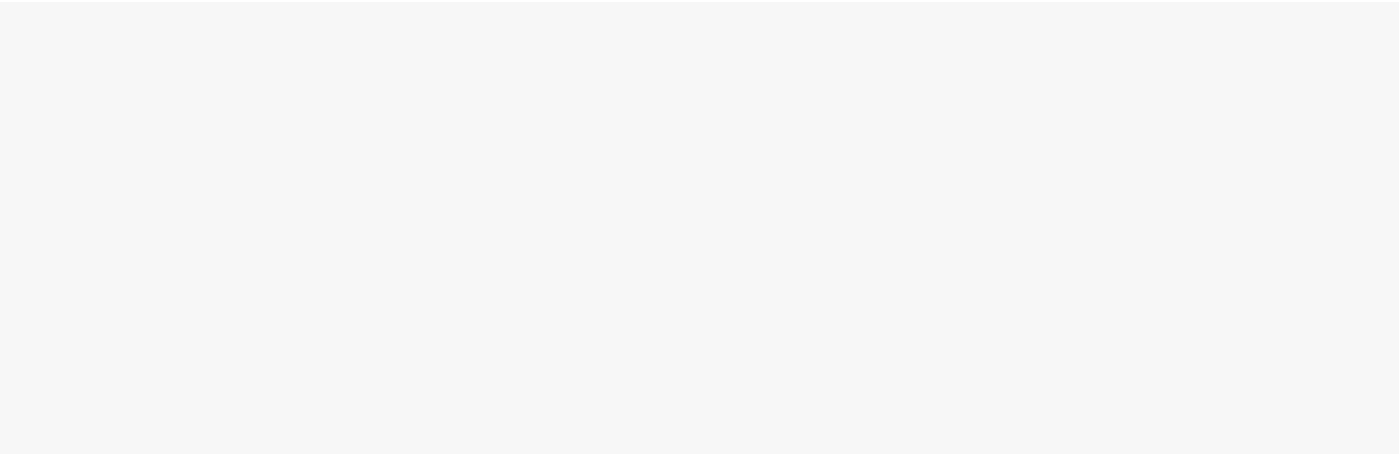
df

	id	original_title	title	popularity	release_date	vote_average	vote_count
0	278	The Shawshank Redemption	The Shawshank Redemption	157.014	1994-09-23	8.708	27325
1	238	The Godfather	The Godfather	155.451	1972-03-14	8.690	20737
2	240	The Godfather Part II	The Godfather Part II	87.158	1974-12-20	8.600	12510
3	424	Schindler's List	Schindler's List	89.846	1993-12-15	8.567	15926
4	389	12 Angry Men	12 Angry Men	60.134	1957-04-10	8.500	8723
...	...	...	...	...	...	...	...
9817	74849	The Star Wars Holiday Special	The Star Wars Holiday Special	18.969	1978-11-17	3.300	461
9818	5491	Battlefield Earth	Battlefield Earth	16.134	2000-05-12	3.300	847

Next steps: **Generate code with** `df`   ⬤ **View recommended plots**   **New interactive sheet**

df.shape

(9822, 7)

⌄ Loading the DataFrame to a CSV file

df.to_csv('movies.csv')

df.info()

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 9822 entries, 0 to 9821
Data columns (total 7 columns):
 #   Column          Non-Null Count  Dtype
---  ------          --------------  -----
 0   id              9822 non-null   int64
 1   original_title  9822 non-null   object
 2   title           9822 non-null   object
 3   popularity      9822 non-null   float64
```

```
  4   release_date   9822 non-null   object
  5   vote_average   9822 non-null   float64
  6   vote_count     9822 non-null   int64
dtypes: float64(2), int64(2), object(3)
memory usage: 537.3+ KB
```

df.head()

	id	original_title	title	popularity	release_date	vote_average	vote_count
0	278	The Shawshank Redemption	The Shawshank Redemption	157.014	1994-09-23	8.708	27325
1	238	The Godfather	The Godfather	155.451	1972-03-14	8.690	20737
2	240	The Godfather Part II	The Godfather Part II	87.158	1974-12-20	8.600	12510
3	424	Schindler's List	Schindler's List	89.846	1993-12-15	8.567	15926

Next steps: **Generate code with df**   ◉ **View recommended plots**   **New interactive sheet**

df.tail()

	id	original_title	title	popularity	release_date	vote_average	vote_count
9817	74849	The Star Wars Holiday Special	The Star Wars Holiday Special	18.969	1978-11-17	3.300	461
9818	5491	Battlefield Earth	Battlefield Earth	16.134	2000-05-12	3.300	847
9819	12142	Alone in the Dark	Alone in the Dark	13.491	2005-01-28	3.244	607

df.describe()

	id	popularity	vote_average	vote_count
count	9.822000e+03	9822.000000	9822.000000	9822.000000
mean	1.973511e+05	28.676479	6.631331	1974.592446
std	2.619611e+05	59.625586	0.782176	3131.345856