Analysis on Netflix Dataset

This Netflix Dataset has information about TV shows and movies availabe on Netflix yill 2021 This dataset is a collected from Flixable which is a third-party Netflix search engine, and available on Kaggle website for free. I am goint to get the info, size,Dtype from the data.Moreover i am going to check the missing values And which series is the most rated. In which year was it released and finally plot some graph through which we can understand more about the data.

The analysis which i have perform on this data set have learned from the course [Data Analysis with Python: Zero to Pandas](). The course is free and Aakash Sir have taught from the basic point so that the person who is new to pandas can also learn.

Downloading the Dataset

- I will start downloading the dataset.I have taken this dataset from Kaggle website.

```
!pip install jovian opendatasets --upgrade --quiet
```

Let's begin by downloading the data, and listing the files within the dataset.

```
dataset_url = 'https://www.kaggle.com/shivamb/netflix-shows'
```

```
import opendatasets as od
od.download(dataset_url)
```

Please provide your Kaggle credentials to download this dataset. Learn more: http://bit.ly/kaggle-creds
Your Kaggle username: sikhapandey
Your Kaggle Key: ········
Downloading netflix-shows.zip to ./netflix-shows

100%|██████████| 1.34M/1.34M [00:00<00:00, 30.8MB/s]

The dataset has been downloaded and extracted.

```
data_dir = './netflix-shows'
```

```
import os
os.listdir(data_dir)
```

['netflix_titles.csv']

Let us save and upload our work to Jovian before continuing.

```
project_name = "Course_project_Netflix"
```

```
!pip install jovian --upgrade -q
```

```
import jovian
```

```
jovian.commit(project=project_name)
```

[jovian] Updating notebook "sikhapandey0120/course-project-netflix" on
https://jovian.ai
[jovian] Committed successfully! https://jovian.ai/sikhapandey0120/course-project-
netflix

'https://jovian.ai/sikhapandey0120/course-project-netflix'

Data Preparation and Cleaning

- I have store the data in a pandas array. Then i have run a quick analysis through the shape,size,columns and information about the data. I have check if any duplicate value or null values are there.

> Instructions (delete this cell):
>
> - Load the dataset into a data frame using Pandas
>
> - Explore the number of rows & columns, ranges of values etc.
>
> - Handle missing, incorrect and invalid data
>
> - Perform any additional steps (parsing dates, creating additional columns, merging multiple dataset etc.)

```
import pandas as pd
netflix_data = pd.read_csv(data_dir+ '/netflix_titles.csv')
```

```
netflix_data
```

	show_id	type	title	director	cast	country	date_added	release_year	rating	duration	
0	s1	Movie	Dick Johnson Is Dead	Kirsten Johnson	NaN	United States	September 25, 2021	2020	PG-13	90 min	Docum

	show_id	type	title	director	cast	country	date_added	release_year	rating	duration	
1	s2	TV Show	Blood & Water	NaN	Ama Qamata, Khosi Ngema, Gail Mabalane, Thaban...	South Africa	September 24, 2021	2021	TV-MA	2 Seasons	Inter TV Sl Dra
2	s3	TV Show	Ganglands	Julien Leclercq	Sami Bouajila, Tracy Gotoas, Samuel Jouy, Nabi...	NaN	September 24, 2021	2021	TV-MA	1 Season	C Inter TV Sl
3	s4	TV Show	Jailbirds New Orleans	NaN	NaN	NaN	September 24, 2021	2021	TV-MA	1 Season	Do R
4	s5	TV Show	Kota Factory	NaN	Mayur More, Jitendra Kumar, Ranjan Raj, Alam K...	India	September 24, 2021	2021	TV-MA	2 Seasons	Inter T Rom Sho
...	...	...	...	...	...	...	...	...	...	...	
8802	s8803	Movie	Zodiac	David Fincher	Mark Ruffalo, Jake Gyllenhaal, Robert Downey J...	United States	November 20, 2019	2007	R	158 min	Cul
8803	s8804	TV Show	Zombie Dumb	NaN	NaN	NaN	July 1, 2019	2018	TV-Y7	2 Seasons	K Sl C
8804	s8805	Movie	Zombieland	Ruben Fleischer	Jesse Eisenberg, Woody Harrelson, Emma Stone, ...	United States	November 1, 2019	2009	R	88 min	C Horro
8805	s8806	Movie	Zoom	Peter Hewitt	Tim Allen, Courteney Cox, Chevy Chase, Kate Ma...	United States	January 11, 2020	2006	PG	88 min	C Family C
8806	s8807	Movie	Zubaan	Mozez Singh	Vicky Kaushal, Sarah-Jane Dias, Raaghav Chanan...	India	March 2, 2019	2015	TV-14	111 min	Inter Movi &

8807 rows × 12 columns

```
netflix_data.shape
```

```
(8807, 12)
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 8807 entries, 0 to 8806
Data columns (total 12 columns):
 #   Column        Non-Null Count  Dtype
---  ------        --------------  -----
 0   show_id       8807 non-null   object
 1   type          8807 non-null   object
 2   title         8807 non-null   object
 3   director      6173 non-null   object
 4   cast          7982 non-null   object
 5   country       7976 non-null   object
 6   date_added    8797 non-null   object
 7   release_year  8807 non-null   int64
 8   rating        8803 non-null   object
 9   duration      8804 non-null   object
 10  listed_in     8807 non-null   object
 11  description   8807 non-null   object
dtypes: int64(1), object(11)
memory usage: 825.8+ KB
```

netflix_data.describe()

	release_year
count	8807.000000
mean	2014.180198
std	8.819312
min	1925.000000
25%	2013.000000
50%	2017.000000
75%	2019.000000
max	2021.000000

netflix_data.nunique()

```
show_id         8807
type               2
title           8807
director        4528
cast            7692
country          748
date_added      1767
```

```
release_year      74
rating            17
duration         220
listed_in        514
description     8775
dtype: int64
```

```
netflix_data.columns
```

```
Index(['show_id', 'type', 'title', 'director', 'cast', 'country', 'date_added',
       'release_year', 'rating', 'duration', 'listed_in', 'description'],
      dtype='object')
```

```
netflix_data.dtypes
```

```
show_id        object
type           object
title          object
director       object
cast           object
country        object
date_added     object
release_year    int64
rating         object
duration       object
listed_in      object
description    object
dtype: object
```

```
netflix_data[['country', 'type']]
```

	country	type
0	United States	Movie
1	South Africa	TV Show
2	NaN	TV Show
3	NaN	TV Show
4	India	TV Show
...	...	...
8802	United States	Movie
8803	NaN	TV Show
8804	United States	Movie
8805	United States	Movie
8806	India	Movie

8807 rows × 2 columns

```
netflix_data['director'].unique()
```

```
array(['Kirsten Johnson', nan, 'Julien Leclercq', ..., 'Majid Al Ansari',
       'Peter Hewitt', 'Mozez Singh'], dtype=object)
```

```
netflix_data.isnull().values.any()
```
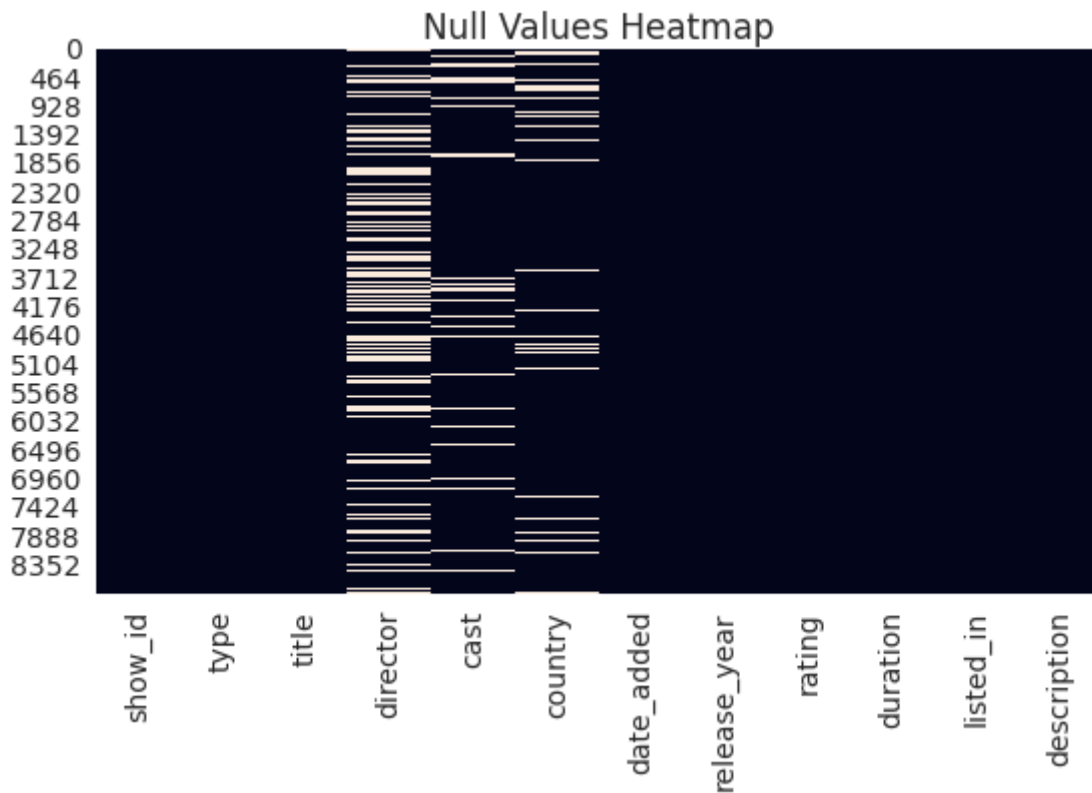
True

```
netflix_data.isnull().sum()
```

```
show_id             0
type                0
title               0
director         2634
cast              825
country           831
date_added         10
release_year        0
rating              4
duration            3
listed_in           0
description         0
dtype: int64
```

```
sns.heatmap(netflix_data.isnull(),cbar=False)
plt.title('Null Values Heatmap')
plt.show()
```



```
netflix_data[netflix_data.duplicated()]
```

show_id	type	title	director	cast	country	date_added	release_year	rating	duration	listed_in	description

```
import jovian
```

```
jovian.commit()
```

[jovian] Updating notebook "sikhapandey0120/course-project-netflix" on
https://jovian.ai
[jovian] Committed successfully! https://jovian.ai/sikhapandey0120/course-project-
netflix

'https://jovian.ai/sikhapandey0120/course-project-netflix'

Exploratory Analysis and Visualization

- I used matplotlib and seaborn libries for plotting some graph that will help us to better understand the data. I have used histogram to see the distribution of TV shows and movies over the year.

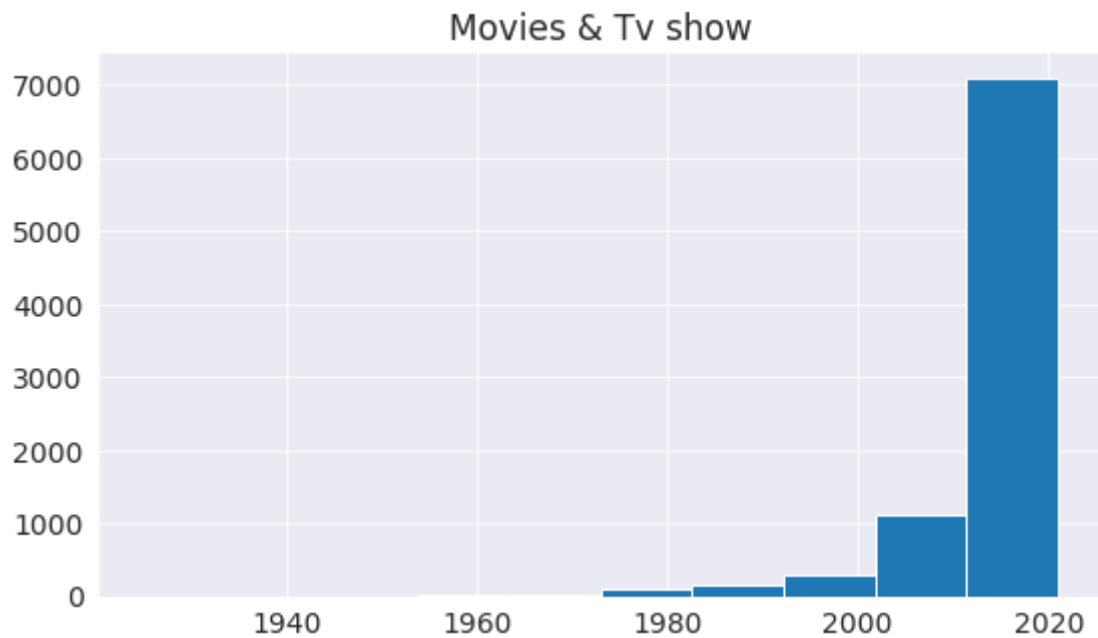Let's begin by importing `matplotlib.pyplot` and `seaborn`.

```
import seaborn as sns
import matplotlib
import matplotlib.pyplot as plt
%matplotlib inline

sns.set_style('darkgrid')
matplotlib.rcParams['font.size'] = 14
matplotlib.rcParams['figure.figsize'] = (9, 5)
matplotlib.rcParams['figure.facecolor'] = '#00000000'
```

Movies and TV Show released over time

- I have plot a histogram to see in which year was most Movies or TV shows released.

```
plt.title('Movies & Tv show')
plt.hist(netflix_data.release_year, bins = 10);
```

Movies & Tv show

Count of movies and TV Shows

- In this data the date_added given is not in to_datetime form so first i converted it in to_datetime format then ploted a bar plot to analyse movie according to their date.
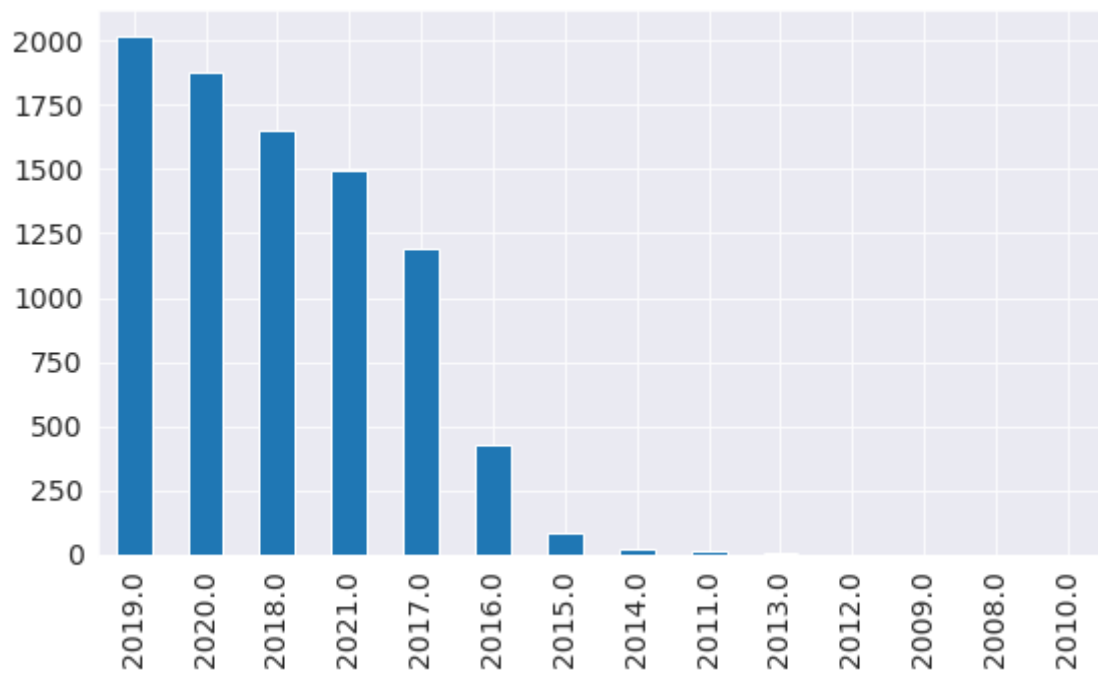
```
netflix_data['Date'] = pd.to_datetime(netflix_data['date_added'])
```

```
netflix_data.head(3)
```

	show_id	type	title	director	cast	country	date_added	release_year	rating	duration	listed
0	s1	Movie	Dick Johnson Is Dead	Kirsten Johnson	NaN	United States	September 25, 2021	2020	PG-13	90 min	Documentar
1	s2	TV Show	Blood & Water	NaN	Ama Qamata, Khosi Ngema, Gail Mabalane, Thaban...	South Africa	September 24, 2021	2021	TV-MA	2 Seasons	Internatio TV Shows, Dramas, Myster
2	s3	TV Show	Ganglands	Julien Leclercq	Sami Bouajila, Tracy Gotoas, Samuel Jouy, Nabi...	NaN	September 24, 2021	2021	TV-MA	1 Season	Crime Sho Internatio TV Shows, A

```
netflix_data['Date'].dt.year.value_counts().plot(kind="bar")
```

<AxesSubplot:>

Type of netflix flim: Movies or TV show

- In this i have plotted a countplot to see how many Movies are there and how many TV shows.

```
netflix_data.groupby('type').type.count()
```
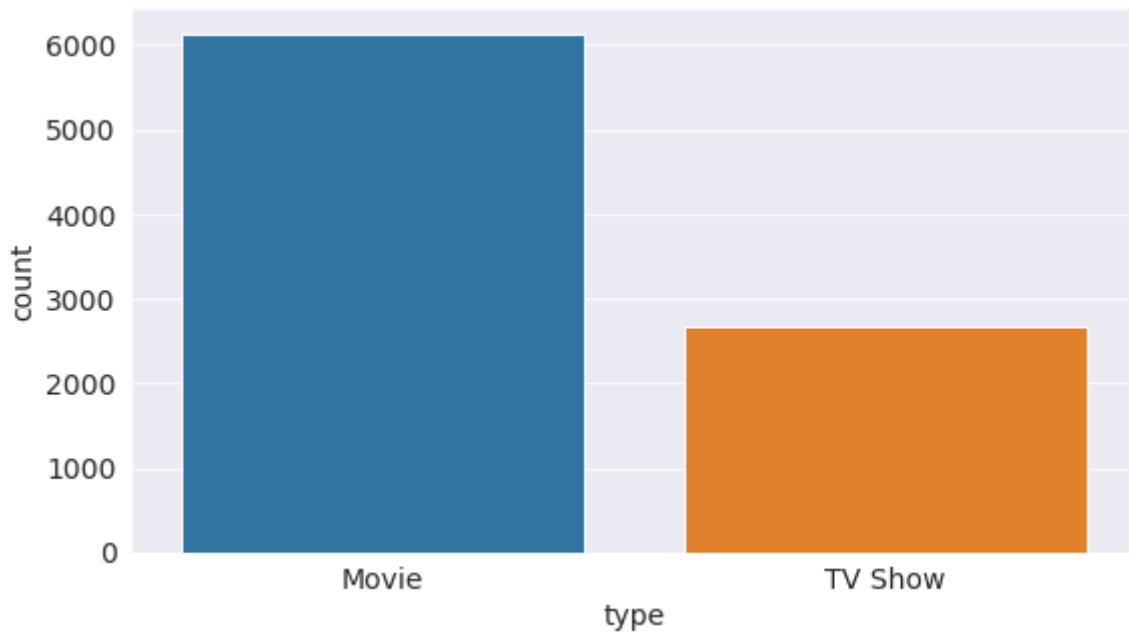
```
type
Movie      6131
TV Show    2676
Name: type, dtype: int64
```

```
sns.countplot(netflix_data['type'])
```

```
/opt/conda/lib/python3.9/site-packages/seaborn/_decorators.py:36: FutureWarning: Pass
the following variable as a keyword arg: x. From version 0.12, the only valid
positional argument will be `data`, and passing other arguments without an explicit
keyword will result in an error or misinterpretation.
  warnings.warn(

<AxesSubplot:xlabel='type', ylabel='count'>
```
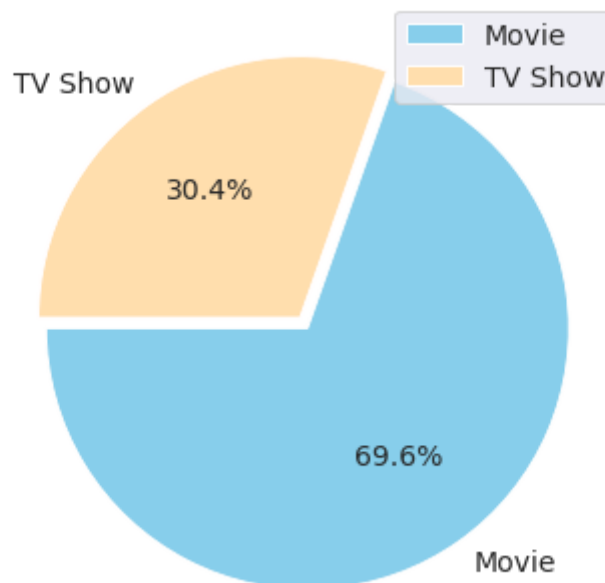
```
plt.figure(figsize = (12,6))
plt.title("% of Netflix Titles that are either Movies or Tv Shows")
g = plt.pie(netflix_data.type.value_counts(), explode = (0.025,0.025), labels = netflix
plt.legend()
plt.show()
```


Netflix Rating

-In this i have shows the rating given to the movies and TV shows

```
netflix_data['rating'].unique()
```

```
array(['PG-13', 'TV-MA', 'PG', 'TV-14', 'TV-PG', 'TV-Y', 'TV-Y7', 'R',
       'TV-G', 'G', 'NC-17', '74 min', '84 min', '66 min', 'NR', nan,
       'TV-Y7-FV', 'UR'], dtype=object)
```
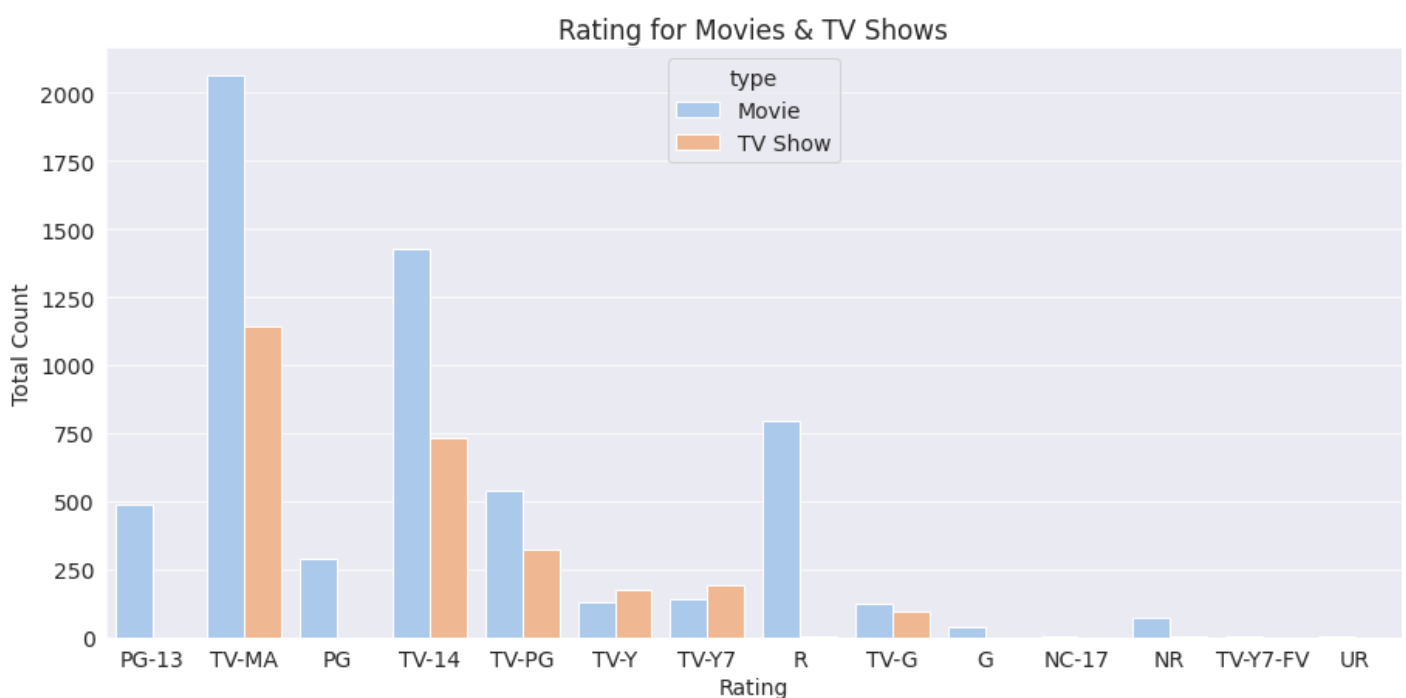
```
order = ['PG-13', 'TV-MA', 'PG', 'TV-14', 'TV-PG', 'TV-Y', 'TV-Y7', 'R',
         'TV-G', 'G', 'NC-17', 'NR', 'TV-Y7-FV', 'UR']
plt.figure(figsize = (15,7))
g = sns.countplot(netflix_data.rating, hue = netflix_data.type, order = order, palette
plt.title("Rating for Movies & TV Shows")
plt.xlabel("Rating")
plt.ylabel("Total Count")
plt.show()
```

/opt/conda/lib/python3.9/site-packages/seaborn/_decorators.py:36: FutureWarning: Pass
the following variable as a keyword arg: x. From version 0.12, the only valid
positional argument will be `data`, and passing other arguments without an explicit
keyword will result in an error or misinterpretation.
  warnings.warn(

Let us save and upload our work to Jovian before continuing

Content added each year

```
netflix_date = netflix_data['date_added'].value_counts().to_frame().rename(columns = {'
netflix_date = netflix_date[netflix_date.Date != 2020]
netflix_date
```

AttributeError   Traceback (most recent call last)
/tmp/ipykernel_41/2956576476.py in <module>
      1 netflix_date =
netflix_data['date_added'].value_counts().to_frame().rename(columns = {'index':
'Date','year_added':'count'})
----> 2 netflix_date = netflix_date[netflix_date.Date != 2020]
      3 netflix_date

```
/opt/conda/lib/python3.9/site-packages/pandas/core/generic.py in __getattr__(self, name)
   5485          ):
   5486              return self[name]
-> 5487          return object.__getattribute__(self, name)
   5488
   5489      def __setattr__(self, name: str, value) -> None:
```

AttributeError: 'DataFrame' object has no attribute 'Date'

```
import jovian
```

```
jovian.commit()
```

[jovian] Updating notebook "sikhapandey0120/course-project-netflix" on
https://jovian.ai
[jovian] Committed successfully! https://jovian.ai/sikhapandey0120/course-project-netflix

'https://jovian.ai/sikhapandey0120/course-project-netflix'

Asking and Answering Questions

- I have asked some of the question and given the answer.

Q1: Which country has the highest No.of Tv Shows

```
netflix_data_tvshows = netflix_data[netflix_data['type'] == 'TV Show']
```

```
netflix_data_tvshows
```

	show_id	type	title	director	cast	country	date_added	release_year	rating	duration	
1	s2	TV Show	Blood & Water	NaN	Ama Qamata, Khosi Ngema, Gail Mabalane, Thaban...	South Africa	September 24, 2021	2021	TV-MA	2 Seasons	Inter T TV TV I
2	s3	TV Show	Ganglands	Julien Leclercq	Sami Bouajila, Tracy Gotoas, Samuel Jouy, Nabi...	NaN	September 24, 2021	2021	TV-MA	1 Season	Inter T
3	s4	TV Show	Jailbirds New Orleans	NaN	NaN	NaN	September 24, 2021	2021	TV-MA	1 Season	Do R

	show_id	type	title	director	cast	country	date_added	release_year	rating	duration	
4	s5	TV Show	Kota Factory	NaN	Mayur More, Jitendra Kumar, Ranjan Raj, Alam K...	India	September 24, 2021	2021	TV-MA	2 Seasons	Inter TV F T
5	s6	TV Show	Midnight Mass	Mike Flanagan	Kate Siegel, Zach Gilford, Hamish Linklater, H...	NaN	September 24, 2021	2021	TV-MA	1 Season	TV T TV N
...	...	...	...	...	...	...	...	...	...	...	
8795	s8796	TV Show	Yu-Gi-Oh! Arc-V	NaN	Mike Liscio, Emily Bauer, Billy Bob Thompson, ...	Japan, Canada	May 1, 2018	2015	TV-Y7	2 Seasons	Ser
8796	s8797	TV Show	Yunus Emre	NaN	Gökhan Atalay, Payidar Tüfekçioglu, Baran Akbu...	Turkey	January 17, 2017	2016	TV-PG	2 Seasons	Inter T TV
8797	s8798	TV Show	Zak Storm	NaN	Michael Johnston, Jessica Gee-George, Christin...	United States, France, South Korea, Indonesia	September 13, 2018	2016	TV-Y7	3 Seasons	
8800	s8801	TV Show	Zindagi Gulzar Hai	NaN	Sanam Saeed, Fawad Khan, Ayesha Omer, Mehreen ...	Pakistan	December 15, 2016	2012	TV-PG	1 Season	Inter T F T
8803	s8804	TV Show	Zombie Dumb	NaN	NaN	NaN	July 1, 2019	2018	TV-Y7	2 Seasons	K SI C

2676 rows × 13 columns

```
netflix_data_tvshows.country.value_counts()
```

```
United States                              760
United Kingdom                             213
Japan                                      169
South Korea                                158
India                                       79
                                           ...
Belarus                                      1
United Kingdom, Australia                    1
France, Australia, Germany                   1
Australia, New Zealand, United States        1
```

```
United States, France, South Korea, Indonesia        1
Name: country, Length: 196, dtype: int64
```

Unites States have the highest number of TV Shows in the country

Q2: Find all the instance where: Type is 'Movies' And Listed in 'Dramas' or Type is 'TV Shows ' And Listed in 'Kids TV'

```
netflix_data[(netflix_data['type'] == 'Movie') & (netflix_data['listed_in'] == 'Dramas'
```

	show_id	type	title	director	cast	country	date_added	release_year	rating	duration	li
34	s35	TV Show	Tayo and Little Wizards	NaN	Dami Lee, Jason Lee, Bommie Catherine Han, Jen...	NaN	September 17, 2021	2020	TV-Y7	1 Season	K
39	s40	TV Show	Chhota Bheem	NaN	Vatsal Dubey, Julie Tejwani, Rupa Bhimani, Jig...	India	September 16, 2021	2021	TV-Y7	3 Seasons	K
65	s66	TV Show	Numberblocks	NaN	Beth Chalmers, David Holt, Marcel McCalla, Ter...	United Kingdom	September 15, 2021	2021	TV-Y	6 Seasons	K
89	s90	TV Show	Mighty Raju	NaN	Julie Tejwani, Sabina Malik, Jigna Bhardwaj, R...	NaN	September 9, 2021	2017	TV-Y7	4 Seasons	K
100	s101	TV Show	Tobot Galaxy Detectives	NaN	Austin Abell, Travis Turner, Cole Howard, Anna...	NaN	September 7, 2021	2019	TV-Y7	2 Seasons	K
...	...	...	...	...	...	...	...	...	...	...	...
8691	s8692	Movie	Wakefield	Robin Swicord	Bryan Cranston, Jennifer Garner, Jason O'Mara,...	United States	March 2, 2019	2016	R	109 min	C
8696	s8697	Movie	War Horse	Steven Spielberg	Emily Watson, David Thewlis, Peter Mullan, Nie...	United States, India	May 6, 2019	2011	PG-13	147 min	C

	show_id	type	title	director	cast	country	date_added	release_year	rating	duration	li
8783	s8784	TV Show	Yoko	NaN	Eileen Stevens, Alyson Leigh Rosenfeld, Sarah …	NaN	June 23, 2018	2016	TV-Y	1 Season	K
8785	s8786	TV Show	YOM	NaN	Sairaj, Devyani Dagaonkar, Ketan Singh, Mayur …	NaN	June 7, 2018	2016	TV-Y7	1 Season	K
8797	s8798	TV Show	Zak Storm	NaN	Michael Johnston, Jessica Gee-George, Christin…	United States, France, South Korea, Indonesia	September 13, 2018	2016	TV-Y7	3 Seasons	K

358 rows × 13 columns

In this the type In movies which is listed under dramas or the type in TV Show which is listed under Kids Tv are listed

Q3: What is the maximum duration of a Movie/ Show on Netflix?

```
netflix_data.duration.unique()
```

```
array(['90 min', '2 Seasons', '1 Season', '91 min', '125 min',
       '9 Seasons', '104 min', '127 min', '4 Seasons', '67 min', '94 min',
       '5 Seasons', '161 min', '61 min', '166 min', '147 min', '103 min',
       '97 min', '106 min', '111 min', '3 Seasons', '110 min', '105 min',
       '96 min', '124 min', '116 min', '98 min', '23 min', '115 min',
       '122 min', '99 min', '88 min', '100 min', '6 Seasons', '102 min',
       '93 min', '95 min', '85 min', '83 min', '113 min', '13 min',
       '182 min', '48 min', '145 min', '87 min', '92 min', '80 min',
       '117 min', '128 min', '119 min', '143 min', '114 min', '118 min',
       '108 min', '63 min', '121 min', '142 min', '154 min', '120 min',
       '82 min', '109 min', '101 min', '86 min', '229 min', '76 min',
       '89 min', '156 min', '112 min', '107 min', '129 min', '135 min',
       '136 min', '165 min', '150 min', '133 min', '70 min', '84 min',
       '140 min', '78 min', '7 Seasons', '64 min', '59 min', '139 min',
       '69 min', '148 min', '189 min', '141 min', '130 min', '138 min',
       '81 min', '132 min', '10 Seasons', '123 min', '65 min', '68 min',
       '66 min', '62 min', '74 min', '131 min', '39 min', '46 min',
       '38 min', '8 Seasons', '17 Seasons', '126 min', '155 min',
       '159 min', '137 min', '12 min', '273 min', '36 min', '34 min',
       '77 min', '60 min', '49 min', '58 min', '72 min', '204 min',
       '212 min', '25 min', '73 min', '29 min', '47 min', '32 min',
       '35 min', '71 min', '149 min', '33 min', '15 min', '54 min',
       '224 min', '162 min', '37 min', '75 min', '79 min', '55 min',
       '158 min', '164 min', '173 min', '181 min', '185 min', '21 min',
       '24 min', '51 min', '151 min', '42 min', '22 min', '134 min',
```

```
'177 min', '13 Seasons', '52 min', '14 min', '53 min', '8 min',
'57 min', '28 min', '50 min', '9 min', '26 min', '45 min',
'171 min', '27 min', '44 min', '146 min', '20 min', '157 min',
'17 min', '203 min', '41 min', '30 min', '194 min', '15 Seasons',
'233 min', '237 min', '230 min', '195 min', '253 min', '152 min',
'190 min', '160 min', '208 min', '180 min', '144 min', '5 min',
'174 min', '170 min', '192 min', '209 min', '187 min', '172 min',
'16 min', '186 min', '11 min', '193 min', '176 min', '56 min',
'169 min', '40 min', '10 min', '3 min', '168 min', '312 min',
'153 min', '214 min', '31 min', '163 min', '19 min', '12 Seasons',
nan, '179 min', '11 Seasons', '43 min', '200 min', '196 min',
'167 min', '178 min', '228 min', '18 min', '205 min', '201 min',
'191 min'], dtype=object)
```

```
netflix_data[['Minutes', 'Unit']] = netflix_data['duration'].str.split( ' ', expand = T
```

```
netflix_data.head(2)
```

	show_id	type	title	director	cast	country	date_added	release_year	rating	duration	listed_i
0	s1	Movie	Dick Johnson Is Dead	Kirsten Johnson	NaN	United States	September 25, 2021	2020	PG-13	90 min	Documentarie
1	s2	TV Show	Blood & Water	NaN	Ama Qamata, Khosi Ngema, Gail Mabalane, Thaban...	South Africa	September 24, 2021	2021	TV-MA	2 Seasons	Internationa TV Shows, T' Dramas, T' Mysterie

In this the maximun duration of the show is 90 minutes.

Q4: How many movies got the TV-14 rating in India?

```
netflix_data[(netflix_data['type'] == 'Movie') & (netflix_data['rating'] == 'TV-14')]
```

	show_id	type	title	director	cast	country	date_added	release_year	rating	duration	
18	s19	Movie	Intrusion	Adam Salky	Freida Pinto, Logan Marshall-Green, Robert Joh...	NaN	September 22, 2021	2021	TV-14	94 min	
24	s25	Movie	Jeans	S. Shankar	Prashanth, Aishwarya Rai Bachchan, Sri Lakshmi...	India	September 21, 2021	1998	TV-14	166 min	Cc Inter R

	show_id	type	title	director	cast	country	date_added	release_year	rating	duration	
30	s31	Movie	Ankahi Kahaniya	Ashwiny Iyer Tiwari, Abhishek Chaubey, Saket C...	Abhishek Banerjee, Rinku Rajguru, Delzad Hiwal...	NaN	September 17, 2021	2021	TV-14	111 min	Inde... Inter...
51	s52	Movie	InuYasha the Movie 2: The Castle Beyond the Lo...	Toshiya Shinohara	Kappei Yamaguchi, Satsuki Yukino, Mieko Harada...	Japan	September 15, 2021	2002	TV-14	99 min	Ac... F... Int...
52	s53	Movie	InuYasha the Movie 3: Swords of an Honorable R...	Toshiya Shinohara	Kappei Yamaguchi, Satsuki Yukino, Koji Tsujita...	Japan	September 15, 2021	2003	TV-14	99 min	Ac... F... Int...
...	...	...	...	...	...	...	...	...	...	...	
8772	s8773	Movie	Yamla Pagla Deewana 2	Sangeeth Sivan	Dharmendra, Sunny Deol, Bobby Deol, Neha Sharm...	India	May 1, 2017	2013	TV-14	147 min	Ac... C... Inter...
8774	s8775	Movie	يوم الدين	Abu Bakr Shawky	Rady Gamal, Ahmed Abdelhafiz, Shahira Fahmy, S...	Egypt, Austria, United States	October 22, 2019	2018	TV-14	97 min	Inde... Inter...
8794	s8795	Movie	اشتباك	Mohamed Diab	Nelly Karim, Hany Adel, Tarek Abdel Aziz, Ahme...	Egypt, France	October 11, 2018	2016	TV-14	98 min	Inde... Inter...
8799	s8800	Movie	Zenda	Avadhoot Gupte	Santosh Juvekar, Siddharth Chandekar, Sachit P...	India	February 15, 2018	2009	TV-14	120 min	Inter...
8806	s8807	Movie	Zubaan	Mozez Singh	Vicky Kaushal, Sarah-Jane Dias, Raaghav Chanan...	India	March 2, 2019	2015	TV-14	111 min	Inter... I...

1427 rows × 15 columns

```
netflix_data[(netflix_data['type'] == 'Movie') & (netflix_data['rating'] =='TV-14')].sh
```

(1427, 15)

```
netflix_data[(netflix_data['type'] == 'Movie') & (netflix_data['rating'] =='TV-14') &(
```

	show_id	type	title	director	cast	country	date_added	release_year	rating	duration

	show_id	type	title	director	cast	country	date_added	release_year	rating	duration	
24	s25	Movie	Jeans	S. Shankar	Prashanth, Aishwarya Rai Bachchan, Sri Lakshmi...	India	September 21, 2021	1998	TV-14	166 min	C Inte F
105	s106	Movie	Angamaly Diaries	Lijo Jose Pellissery	Antony Varghese, Reshma Rajan, Binny Rinky Ben...	India	September 5, 2021	2017	TV-14	128 min	A C
114	s115	Movie	Anjaam	Rahul Rawail	Madhuri Dixit, Shah Rukh Khan, Tinnu Anand, Jo...	India	September 2, 2021	1994	TV-14	143 min	Inte
118	s119	Movie	Gurgaon	Shanker Raman	Akshay Oberoi, Pankaj Tripathi, Ragini Khanna,...	India	September 2, 2021	2017	TV-14	106 min	Inte
126	s127	Movie	Shikara	Vidhu Vinod Chopra	Aadil Khan, Sadia Khateeb, Zain Khan Durrani, ...	India	September 2, 2021	2020	TV-14	115 min	Inte F
...	...	...	...	...	...	...	...	...	...	...	
8770	s8771	Movie	Yaadein	Subhash Ghai	Jackie Shroff, Hrithik Roshan, Kareena Kapoor,...	India	March 1, 2018	2001	TV-14	171 min	Inte F
8771	s8772	Movie	Yaara O Dildaara	Ksshitij Chaudhary	Harbhajan Mann, Tulip Joshi, Kabir Bedi, Gulza...	India	November 1, 2017	2011	TV-14	132 min	Inte
8772	s8773	Movie	Yamla Pagla Deewana 2	Sangeeth Sivan	Dharmendra, Sunny Deol, Bobby Deol, Neha Sharm...	India	May 1, 2017	2013	TV-14	147 min	A C Inte
8799	s8800	Movie	Zenda	Avadhoot Gupte	Santosh Juvekar, Siddharth Chandekar, Sachit P...	India	February 15, 2018	2009	TV-14	120 min	Inte
8806	s8807	Movie	Zubaan	Mozez Singh	Vicky Kaushal, Sarah-Jane Dias, Raaghav Chanan...	India	March 2, 2019	2015	TV-14	111 min	Inte

526 rows × 15 columns

```
netflix_data[(netflix_data['type'] == 'Movie') & (netflix_data['rating'] =='TV-14') &(
```

(526, 15)

According to the analysis i have found that 526 movies that are in Netflix are rated TV-14 in India.

Q5: For 'Kota Factory', What is the show id and who is the director of this show?

```
netflix_data[netflix_data['title'].isin(['Kota Factory'])]
```

	show_id	type	title	director	cast	country	date_added	release_year	rating	duration	listed_in	desc
4	s5	TV Show	Kota Factory	NaN	Mayur More, Jitendra Kumar, Ranjan Raj, Alam K...	India	September 24, 2021	2021	TV-MA	2 Seasons	International TV Shows, Romantic TV Shows, TV ...	In a co kn t

```
netflix_data[netflix_data['title'].str.contains('Kota Factory')]
```

	show_id	type	title	director	cast	country	date_added	release_year	rating	duration	listed_in	desc
4	s5	TV Show	Kota Factory	NaN	Mayur More, Jitendra Kumar, Ranjan Raj, Alam K...	India	September 24, 2021	2021	TV-MA	2 Seasons	International TV Shows, Romantic TV Shows, TV ...	In a co kn t

In this all the details of the show Kota Factory have been shown

Let us save and upload our work to Jovian before continuing.

```
import jovian
```

```
jovian.commit()
```

[jovian] Updating notebook "sikhapandey0120/course-project-netflix" on https://jovian.ai

[jovian] Committed successfully! https://jovian.ai/sikhapandey0120/course-project-netflix

'https://jovian.ai/sikhapandey0120/course-project-netflix'

Inferences and Conclusion

- After downloading the data have seen all the information about the data. Plotting the graph i have analyze that as the year increases the Movie and TV shows are increasing. I have shown which is the highest rated movie in India. And analyzing data in lot more ways. There are lot more than can be done in this dataset.

References

- https://www.kaggle.com/datasets/shivamb/netflix-shows

- https://www.w3schools.com/

Future Work

- More seaborn graphs
- Rating analysis for Movies & TV Shows
- National and International MOvies & TV shows released

```
import jovian
```

```
jovian.commit()
```

[jovian] Updating notebook "sikhapandey0120/course-project-netflix" on https://jovian.ai
[jovian] Committed successfully! https://jovian.ai/sikhapandey0120/course-project-netflix

'https://jovian.ai/sikhapandey0120/course-project-netflix'

```
import jovian
```

```
jovian.commit()
```

[jovian] Attempting to save notebook..
[jovian] Updating notebook "aakashns/zerotopandas-course-project-starter" on https://jovian.ml/
[jovian] Uploading notebook..
[jovian] Capturing environment..
[jovian] Committed successfully! https://jovian.ml/aakashns/zerotopandas-course-project-starter

'https://jovian.ml/aakashns/zerotopandas-course-project-starter'