

Import all the important library and read CSV?

```
In [1]: import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
```

```
In [2]: df = pd.read_csv(r"C:\Users\Ashish\OneDrive\Pyhton Project file ALL\Project 8 -
```

```
In [3]: df.head(2)
```

```
Out[3]:
```

	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	4 Seasons
1	s2	Movie	07:19	Jorge Michel Grau	Demián Bichir, Héctor Bonilla, Oscar Serrano, ...	Mexico	December 23, 2016	TV-MA	93 min

```
In [4]: df.tail(2)
```

```
Out[4]:
```

	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
7787	s7786	TV Show	Zumbo's Just Desserts	NaN	Adriano Zumbo, Rachel Khoo	Australia	October 31, 2020	TV-PG	Seasc
7788	s7787	Movie	ZZ TOP: THAT LITTLE OL' BAND FROM TEXAS	Sam Dunn	NaN	United Kingdom, Canada, United States	March 1, 2020	TV-MA	90 m

```
In [5]: df.shape
```

```
Out[5]: (7789, 11)
```

```
In [6]: df.size
```

```
Out[6]: 85679
```

```
In [7]: df.columns
```

```
Out[7]: Index(['Show_Id', 'Category', 'Title', 'Director', 'Cast', 'Country',  
              'Release_Date', 'Rating', 'Duration', 'Type', 'Description'],  
              dtype='object')
```

```
In [8]: df.dtypes
```

```
Out[8]: Show_Id      object
        Category    object
        Title       object
        Director    object
        Cast        object
        Country     object
        Release_Date object
        Rating      object
        Duration    object
        Type        object
        Description object
        dtype: object
```

```
In [9]: df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 7789 entries, 0 to 7788
Data columns (total 11 columns):
#   Column          Non-Null Count  Dtype
---  -
0   Show_Id         7789 non-null   object
1   Category        7789 non-null   object
2   Title           7789 non-null   object
3   Director        5401 non-null   object
4   Cast            7071 non-null   object
5   Country         7282 non-null   object
6   Release_Date    7779 non-null   object
7   Rating          7782 non-null   object
8   Duration        7789 non-null   object
9   Type            7789 non-null   object
10  Description      7789 non-null   object
dtypes: object(11)
memory usage: 669.5+ KB
```

```
In [10]: df.head(2)
```

```
Out[10]:
```

	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	4 Seasons
1	s2	Movie	07:19	Jorge Michel Grau	Demián Bichir, Héctor Bonilla, Oscar Serrano, ...	Mexico	December 23, 2016	TV-MA	93 min

Check for duplicate on all coloumn and remove them?

```
In [11]: df[df.duplicated()]
```

Out[11]:	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Dura	
	6300	s684	Movie	Backfire	Dave Patten	Black Deniro, Byron "Squally" Vinson, Dominic ...	United States	April 5, 2019	TV-MA	97
	6622	s6621	Movie	The Lost Okoroshi	Abba T. Makama	Seun Ajayi, Judith Audu, Tope Tedela, Ifu Enna...	Nigeria	September 4, 2020	TV-MA	94

```
In [12]: df.drop_duplicates(inplace = True)
```

```
In [13]: df[df.duplicated()]
```

```
Out[13]:
```

Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration	Type	Des
---------	----------	-------	----------	------	---------	--------------	--------	----------	------	-----

```
In [14]: df.shape
```

```
Out[14]: (7787, 11)
```

```
In [15]: df.head(2)
```

Out[15]:	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration	
	0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	4 Seasons
	1	s2	Movie	07:19	Jorge Michel Grau	Demián Bichir, Héctor Bonilla, Oscar Serrano, ...	Mexico	December 23, 2016	TV-MA	93 min

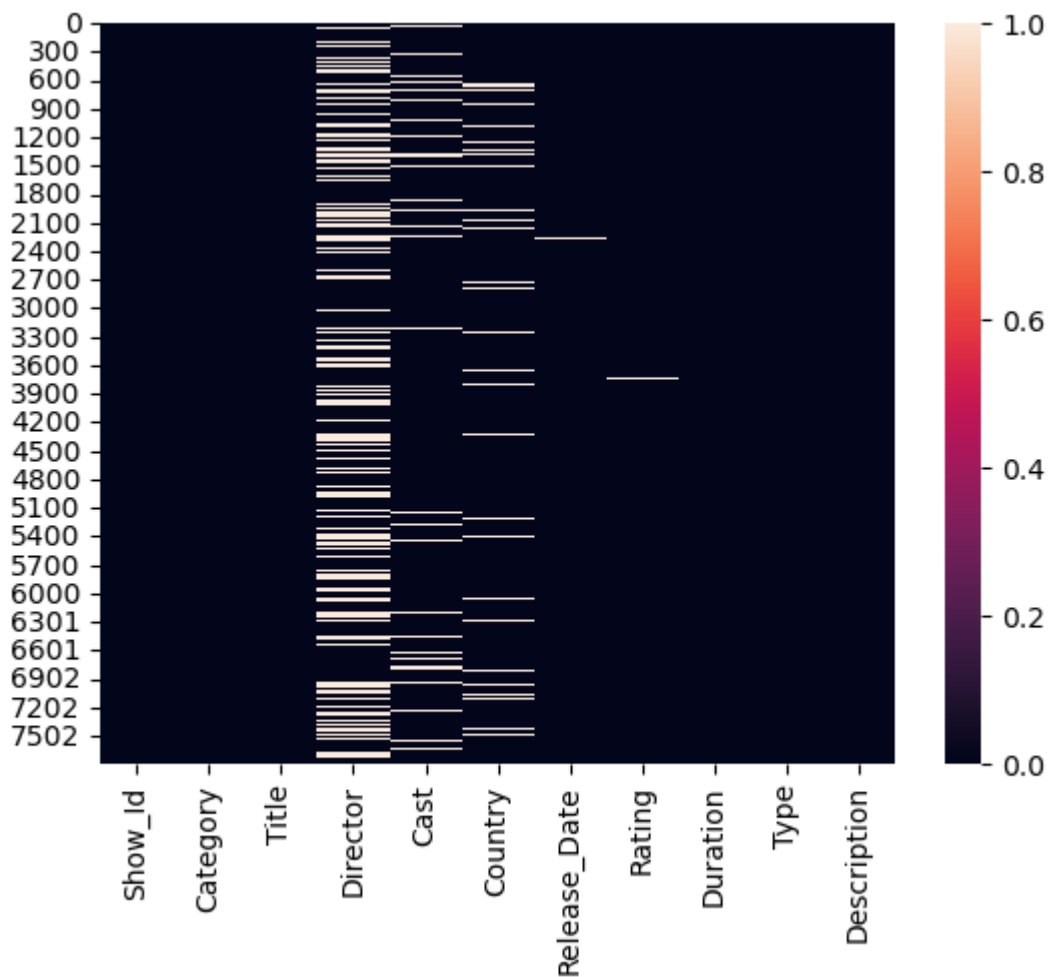
Check for all the Null value in dataframe and sl it in Heatmap?

```
In [16]: df.isnull().sum()
```

```
Out[16]: Show_Id      0
Category      0
Title         0
Director     2388
Cast         718
Country      507
Release_Date  10
Rating        7
Duration      0
Type          0
Description   0
dtype: int64
```

```
In [17]: sns.heatmap(df.isnull())
```

```
Out[17]: <Axes: >
```



```
In [18]: df.head(2)
```

	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	4 Seasons
1	s2	Movie	07:19	Jorge Michel Grau	Demián Bichir, Héctor Bonilla, Oscar Serrano, ...	Mexico	December 23, 2016	TV-MA	93 min

For "House Of Card" Tv Shows, find me the show ID and director of this show?

```
In [19]: df[df["Title"].isin(["House of Cards"])]
```

```
Out[19]:
```

	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration	
	2832	s2833	TV Show	House of Cards	Robin Wright, David Fincher, Gerald McRaney, J...	Kevin Spacey, Robin Wright, Kate Mara, Corey S...	United States	November 2, 2018	TV-MA	6 Seasons

```
In [20]: df[df["Title"].str.contains("House of Cards")]
```

```
Out[20]:
```

	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration	
	2832	s2833	TV Show	House of Cards	Robin Wright, David Fincher, Gerald McRaney, J...	Kevin Spacey, Robin Wright, Kate Mara, Corey S...	United States	November 2, 2018	TV-MA	6 Seasons

In which year highest number of the Tv SHows Movies are released/show with the help of bar graph?

```
In [21]: df.dtypes
```

```
Out[21]: Show_Id      object
Category      object
Title         object
Director      object
Cast          object
Country       object
Release_Date  object
Rating        object
Duration      object
Type          object
Description   object
dtype: object
```

```
In [22]: df["date_n"] = pd.to_datetime(df["Release_Date"].str.strip(), format="%B %d, %Y")
```

```
In [23]: df.head(2)
```

```
Out[23]:
```

	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	4 Seasons
1	s2	Movie	07:19	Jorge Michel Grau	Demián Bichir, Héctor Bonilla, Oscar Serrano, ...	Mexico	December 23, 2016	TV-MA	93 min

```
In [24]: df.dtypes
```

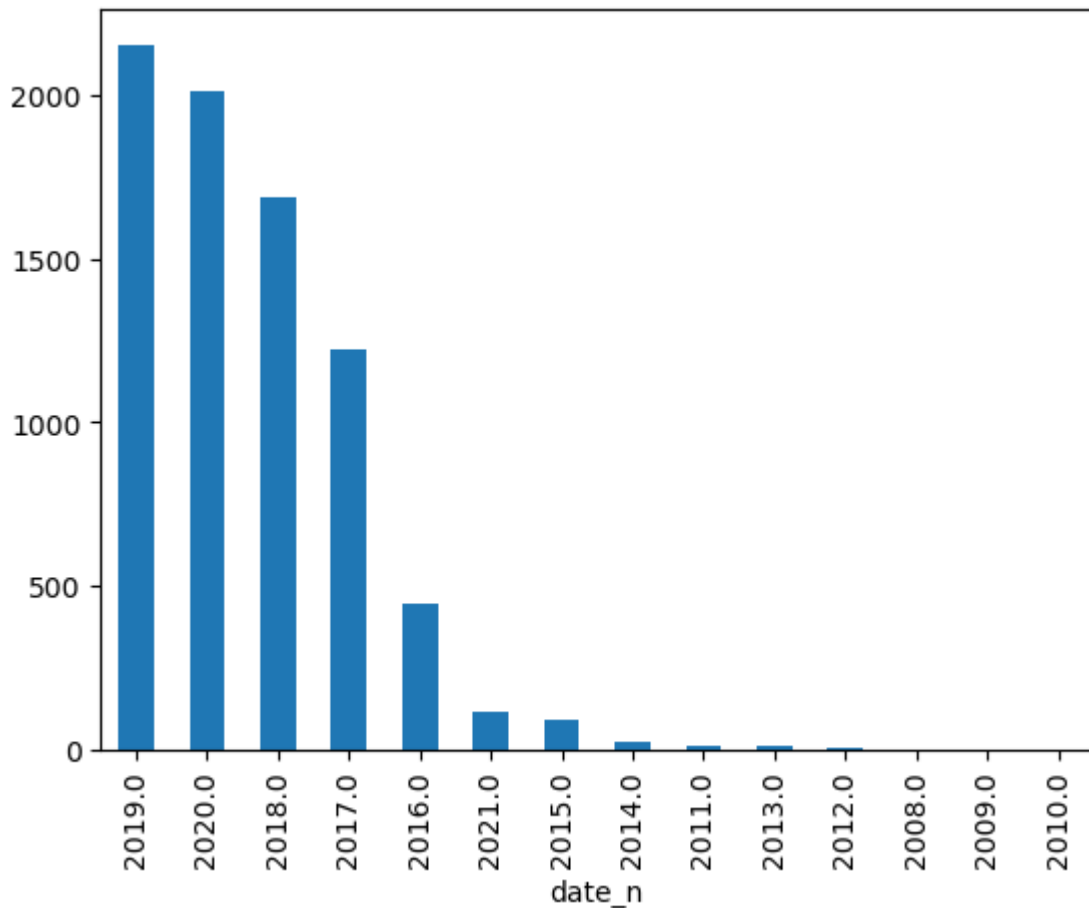
```
Out[24]: Show_Id          object
Category          object
Title             object
Director          object
Cast              object
Country           object
Release_Date      object
Rating            object
Duration          object
Type              object
Description        object
date_n            datetime64[ns]
dtype: object
```

```
In [25]: df["date_n"].dt.year.value_counts()
```

```
Out[25]: date_n
2019.0    2153
2020.0    2009
2018.0    1685
2017.0    1225
2016.0     443
2021.0     117
2015.0      88
2014.0     25
2011.0     13
2013.0     11
2012.0      3
2008.0      2
2009.0      2
2010.0      1
Name: count, dtype: int64
```

```
In [26]: df["date_n"].dt.year.value_counts().plot(kind="bar")
```

```
Out[26]: <Axes: xlabel='date_n'>
```



How many movies & Tv Show are in the dataset with the help of bar graph?

```
In [27]: df.head(2)
```

```
Out[27]:
```

	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	4 Seasons
1	s2	Movie	07:19	Jorge Michel Grau	Demián Bichir, Héctor Bonilla, Oscar Serrano, ...	Mexico	December 23, 2016	TV-MA	93 min

```
In [28]: df.groupby("Category").Category.count()
```

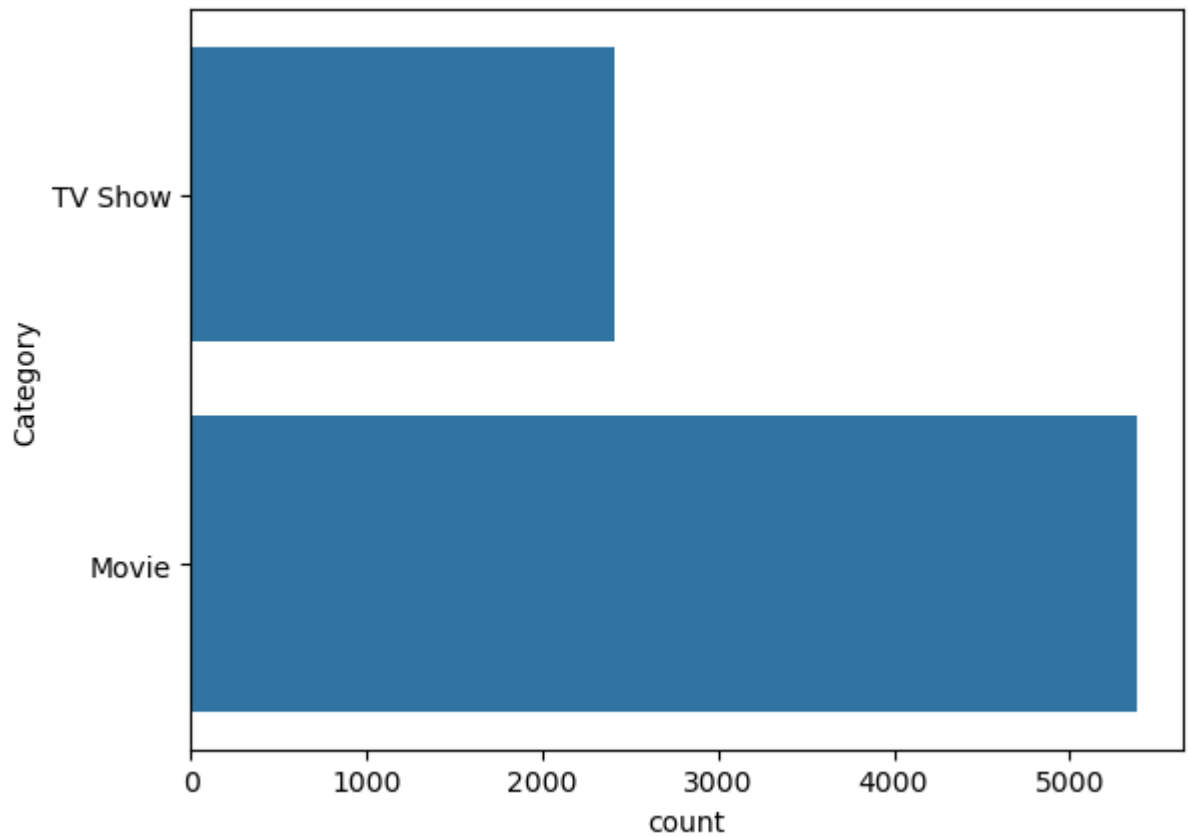
```
Out[28]:
```

Category	count
Movie	5377
TV Show	2410

Name: Category, dtype: int64

```
In [29]: sns.countplot(df["Category"])
```

```
Out[29]: <Axes: xlabel='count', ylabel='Category'>
```



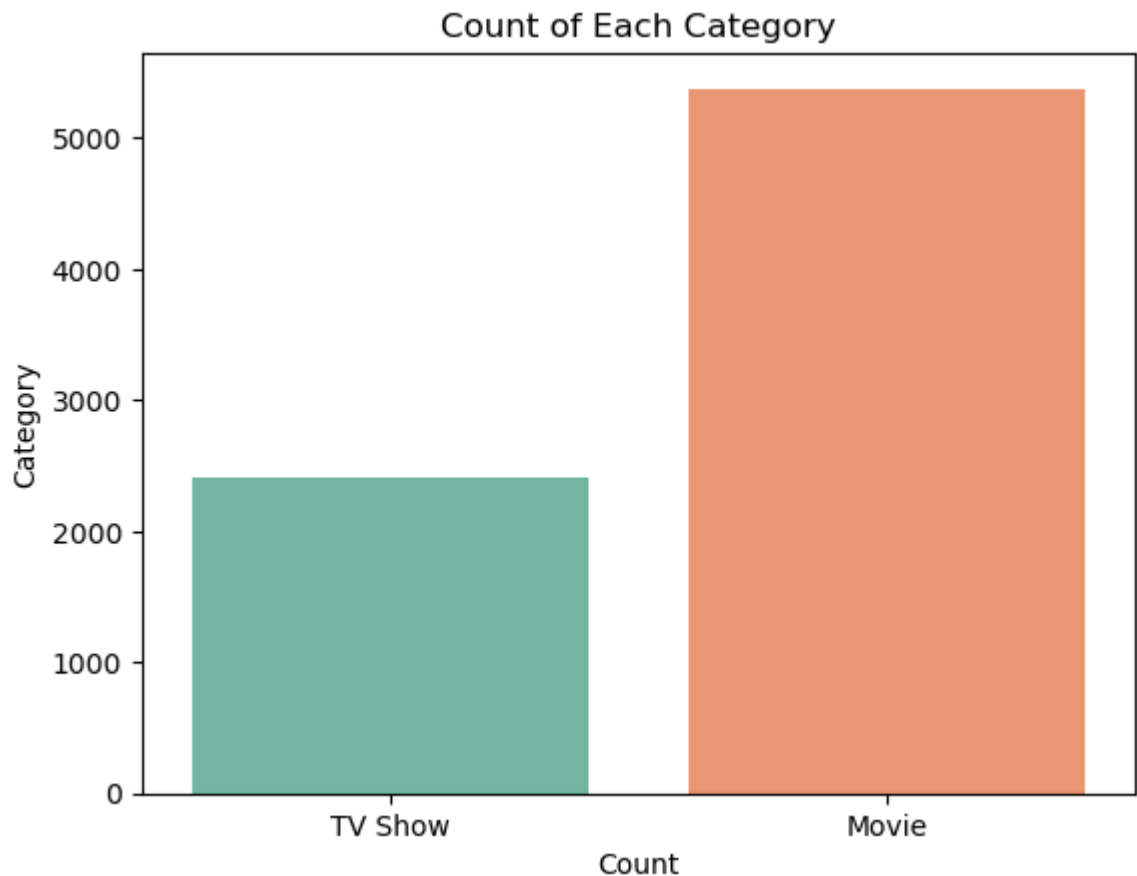
```
In [30]: sns.countplot(data=df, x="Category", palette= "Set2")
plt.title("Count of Each Category", fontsize=12)
plt.xlabel("Count")
plt.ylabel("Category")
```

C:\Users\Ashish\AppData\Local\Temp\ipykernel_5596\1308150058.py:1: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14. Assign the `x` variable to `hue` and set `legend=False` for the same effect.

```
sns.countplot(data=df, x="Category", palette= "Set2")
```

```
Out[30]: Text(0, 0.5, 'Category')
```

Show all the movies that were released in year 2000?

```
In [ ]: df.head(2)
```

```
In [32]: df["year"] = df["date_n"].dt.year
```

```
In [33]: df.head(2)
```

Out[33]:	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	4 Seasons
1	s2	Movie	07:19	Jorge Michel Grau	Demián Bichir, Héctor Bonilla, Oscar Serrano, ...	Mexico	December 23, 2016	TV-MA	93 min

```
In [69]: df[(df["Category"] == "Movie") & (df["year"] == 2000)]

# No movies are released in year 2000!
```

```
Out[69]:
```

Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration	Type	Des
---------	----------	-------	----------	------	---------	--------------	--------	----------	------	-----

Show only the title of all Tv Shows that were released in India only?

```
In [35]: df.head(2)
```

Out[35]:	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	4 Seasons
1	s2	Movie	07:19	Jorge Michel Grau	Demían Bichir, Héctor Bonilla, Oscar Serrano, ...	Mexico	December 23, 2016	TV-MA	93 min

```
In [36]: df[(df["Category"] == "TV Show") & (df["Country"] == "India")] ["Title"]
```

```
Out[36]: 86          21 Sarfarosh: Saragarhi 1897
132          7 (Seven)
340          Agent Raghav
364          Akbar Birbal
533          Anjaan: Rural Myths
...
6249          The Creative Indians
6400  The Golden Years with Javed Akhtar
6469          The House That Made Me
7294          Typewriter
7705          Yeh Meri Family
Name: Title, Length: 71, dtype: object
```

Show top 10 directors, who gave the highest number of Tv shows and Movies?

```
In [37]: df.head(2)
```

Out[37]:	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	4 Seasons
1	s2	Movie	07:19	Jorge Michel Grau	Demían Bichir, Héctor Bonilla, Oscar Serrano, ...	Mexico	December 23, 2016	TV-MA	93 min

```
In [38]: df["Director"].value_counts().head(10)
```

```
Out[38]: Director
Raúl Campos, Jan Suter    18
Marcus Raboy              16
Jay Karas                 14
Cathy Garcia-Molina       13
Jay Chapman               12
Youssef Chahine           12
Martin Scorsese            12
Steven Spielberg          10
David Dhawan               9
Hakan Algül               8
Name: count, dtype: int64
```

Show all the records, where "Category is Movie and "Type is Comedies" or "Country is United Kingdom"?

```
In [39]: df.head(2)
```

```
Out[39]:
```

	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	4 Seasons
1	s2	Movie	07:19	Jorge Michel Grau	Demián Bichir, Héctor Bonilla, Oscar Serrano, ...	Mexico	December 23, 2016	TV-MA	93 min

```
In [40]: df[(df["Category"] == "Movie") & (df["Type"] == "Comedies")] | (df["Country"] == "United Kingdom")
```

```
Out[40]:
```

	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
19	s20	Movie	'89	NaN	Lee Dixon, Ian Wright, Paul Merson	United Kingdom	May 16, 2018	TV-PG	87 min
33	s34	Movie	#realityhigh	Fernando Lebrija	Nesta Cooper, Kate Walsh, John Michael Higgins...	United States	September 8, 2017	TV-14	95 min

In how many Movies/Shows Tom Cruise was ca

```
In [41]: df.head(2)
```

Out[41]:	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration	
0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	4 Seasons	I
1	s2	Movie	07:19	Jorge Michel Grau	Demián Bichir, Héctor Bonilla, Oscar Serrano, ...	Mexico	December 23, 2016	TV-MA	93 min	I

In [42]: `df[df["Cast"] == "Tom Cruise"]` *#This syntax will only work when there is only one value*

Out[42]:

Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration	Type	Description
---------	----------	-------	----------	------	---------	--------------	--------	----------	------	-------------

In [43]: *# We are creating new dataframe and dropping na/nan value*
`df_new = df.dropna()`

In [44]: *# We are creating new dataframe because str.contains function will not work if we have null values*
`df_new.isnull().sum()`

Out[44]:

Show_Id	0
Category	0
Title	0
Director	0
Cast	0
Country	0
Release_Date	0
Rating	0
Duration	0
Type	0
Description	0
date_n	0
year	0
dtype:	int64

In [45]: `df_new[df_new["Cast"].str.contains("Tom Cruise")]`

Out[45]:	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
3860	s3861	Movie	Magnolia	Paul Thomas Anderson	Jeremy Blackman, Tom Cruise, Melinda Dillon, A...	United States	January 1, 2020	R	185
5071	s5071	Movie	Rain Man	Barry Levinson	Dustin Hoffman, Tom Cruise, Valeria Golino, Ge...	United States	July 1, 2019	R	134

What are different ratings defined by Netflix?

In [46]: `df.head(2)`

Out[46]:	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	4 Seasons
1	s2	Movie	07:19	Jorge Michel Grau	Demían Bichir, Héctor Bonilla, Oscar Serrano, ...	Mexico	December 23, 2016	TV-MA	93 min

```
In [47]: df['Rating'].nunique()
```

```
Out[47]: 14
```

```
In [48]: df.Rating.unique()
```

```
Out[48]: array(['TV-MA', 'R', 'PG-13', 'TV-14', 'TV-PG', 'NR', 'TV-G', 'TV-Y', nan, 'TV-Y7', 'PG', 'G', 'NC-17', 'TV-Y7-FV', 'UR'], dtype=object)
```

How many Movies got TV-14 ratings in Canada?

```
In [70]: df.head(2)
```

Out[70]:	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	4 Seasons
1	s2	Movie	07:19	Jorge Michel Grau	Demían Bichir, Héctor Bonilla, Oscar Serrano, ...	Mexico	December 23, 2016	TV-MA	93 min

```
In [49]: df[ (df["Category"]=="Movie") & (df["Rating"]=="TV-14") & (df["Country"]=="Canada") ]
```

Out[49]:	Show_Id	Category	Title	Director	Cast	Country	Release_Date	
	30	s31	Movie	#cats_the_mewvie	Michael Margolis	NaN	Canada	February 5, 2020
	34	s35	Movie	#Roxy	Michael Kennedy	Jake Short, Sarah Fisher, Booboo Stewart, Dann...	Canada	April 10, 2019
	608	s609	Movie	At First Light	Jason Stone	Stefanie Scott, Theodore Pellerin, Percy Hynes...	Canada	December 27, 2018
	1506	s1507	Movie	Counterfeiting in Suburbia	Jason Bourque	Sarah Butler, Larissa Albuquerque, Kayla Walla...	Canada	July 1, 2018
	3713	s3714	Movie	Long Time Running	Jennifer Baichwal, Nicholas de Pencier	Gord Downie, Paul Langlois, Gord Sinclair, Rob...	Canada	November 12, 2017
	3956	s3957	Movie	Martin Matte: La vie, la mort...eh la la..!	Jean-François Blais	Martin Matte	Canada	October 14, 2019
	5336	s5336	Movie	Sadie's Last Days on Earth	Michael Seater	Morgan Taylor Campbell, Clark Backo, Ricardo H...	Canada	August 22, 2017
	5393	s5393	Movie	Sardaar ji	Rohit Jugraj	Diljit Dosanjh, Neeru Bajwa, Mandy Takhar, Jas...	Canada	December 1, 2017
	6062	s6062	Movie	The Accountant of Auschwitz	Matthew Shoychet	NaN	Canada	July 1, 2019
	7025	s7024	Movie	The Wrong Babysitter	George Mendeluk	Daphne Zuniga, Seann Gallagher, Lisa Marie Car...	Canada	June 18, 2019
	7041	s7040	Movie	There's Something in the Water	Ellen Page, Ian Daniel	Ellen Page	Canada	March 27, 2020

How many Movies got the "R Ratings", after ye 2018?

```
In [50]: df.head(2)
```

Out[50]:	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	4 Seasons
1	s2	Movie	07:19	Jorge Michel Grau	Demián Bichir, Héctor Bonilla, Oscar Serrano, ...	Mexico	December 23, 2016	TV-MA	93 min

```
In [51]: df[ (df.Category == "TV Show") & (df.Rating == "R") & (df.year > 2018) ]
```

Out[51]:	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Durati
6437	s6436	TV Show	The Hateful Eight: Extended Version	Quentin Tarantino	Samuel L. Jackson, Kurt Russell, Jennifer Jaso...	NaN	April 25, 2019	R	Seas

What is the Maximum duration of the movie/ Shows in Netflix?

```
In [52]: df.head(2)
```

Out[52]:	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	4 Seasons
1	s2	Movie	07:19	Jorge Michel Grau	Demián Bichir, Héctor Bonilla, Oscar Serrano, ...	Mexico	December 23, 2016	TV-MA	93 min

```
In [53]: df.Duration.unique()
```

```
Out[53]: array(['4 Seasons', '93 min', '78 min', '80 min', '123 min', '1 Season',
                '95 min', '119 min', '118 min', '143 min', '103 min', '89 min',
                '91 min', '149 min', '144 min', '124 min', '87 min', '110 min',
                '128 min', '117 min', '100 min', '2 Seasons', '84 min', '99 min',
                '90 min', '102 min', '104 min', '105 min', '56 min', '125 min',
                '81 min', '97 min', '106 min', '107 min', '109 min', '44 min',
                '75 min', '101 min', '3 Seasons', '37 min', '113 min', '114 min',
                '130 min', '94 min', '140 min', '135 min', '82 min', '70 min',
                '121 min', '92 min', '164 min', '53 min', '83 min', '116 min',
                '86 min', '120 min', '96 min', '126 min', '129 min', '77 min',
                '137 min', '148 min', '28 min', '122 min', '176 min', '85 min',
                '22 min', '68 min', '111 min', '29 min', '142 min', '168 min',
                '21 min', '59 min', '20 min', '98 min', '108 min', '76 min',
                '26 min', '156 min', '30 min', '57 min', '150 min', '133 min',
                '115 min', '154 min', '127 min', '146 min', '136 min', '88 min',
                '131 min', '24 min', '112 min', '74 min', '63 min', '38 min',
                '25 min', '174 min', '60 min', '153 min', '158 min', '151 min',
                '162 min', '54 min', '51 min', '69 min', '64 min', '147 min',
                '42 min', '79 min', '5 Seasons', '40 min', '45 min', '172 min',
                '10 min', '163 min', '9 Seasons', '55 min', '72 min', '61 min',
                '71 min', '160 min', '171 min', '48 min', '139 min', '157 min',
                '15 min', '65 min', '134 min', '161 min', '62 min', '8 Seasons',
                '186 min', '49 min', '73 min', '58 min', '165 min', '166 min',
                '138 min', '159 min', '141 min', '132 min', '52 min', '67 min',
                '34 min', '66 min', '312 min', '180 min', '47 min', '6 Seasons',
                '155 min', '14 min', '177 min', '11 min', '9 min', '46 min',
                '145 min', '11 Seasons', '7 Seasons', '13 Seasons', '8 min',
                '12 min', '12 Seasons', '10 Seasons', '43 min', '50 min', '23 min',
                '185 min', '200 min', '169 min', '27 min', '170 min', '196 min',
                '33 min', '181 min', '204 min', '32 min', '35 min', '167 min',
                '16 Seasons', '179 min', '193 min', '13 min', '214 min', '17 min',
                '173 min', '192 min', '209 min', '187 min', '41 min', '182 min',
                '224 min', '233 min', '189 min', '152 min', '19 min', '15 Seasons',
                '208 min', '237 min', '31 min', '178 min', '230 min', '194 min',
                '228 min', '195 min', '3 min', '16 min', '5 min', '18 min',
                '205 min', '190 min', '36 min', '201 min', '253 min', '203 min',
                '191 min'], dtype=object)
```

```
In [54]: df.Duration.dtypes
```

```
Out[54]: dtype('O')
```

```
In [55]: df[["minutes","units"]] = df["Duration"].str.split(" ", expand = True)
```

```
In [56]: df.head(2)
```

```
Out[56]:
```

	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	4 Seasons
1	s2	Movie	07:19	Jorge Michel Grau	Demián Bichir, Héctor Bonilla, Oscar Serrano, ...	Mexico	December 23, 2016	TV-MA	93 min


```
In [57]: df["minutes"].max()  
df.minutes.max()
```

```
Out[57]: '99'
```

```
In [58]: df["minutes"].min()  
df.minutes.min()
```

```
Out[58]: '1'
```

Which individual country has the highest number of TV Shows?

```
In [59]: df.head(2)
```

```
Out[59]:
```

	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	4 Seasons
1	s2	Movie	07:19	Jorge Michel Grau	Demián Bichir, Héctor Bonilla, Oscar Serrano, ...	Mexico	December 23, 2016	TV-MA	93 min

```
In [60]: df_tvshows = df[df["Category"] == "TV Show"]
```

```
In [61]: df_tvshows.head()
```

Out[61]:	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration
0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	Season
5	s6	TV Show	46	Serdar Akar	Erdal Beşikçioğlu, Yasemin Allen, Melis Birkan...	Turkey	July 1, 2017	TV-MA	Season
11	s12	TV Show	1983	NaN	Robert Więckiewicz, Maciej Musiał, Michalina O...	Poland, United States	November 30, 2018	TV-MA	Season
12	s13	TV Show	1994	Diego Enrique Osorno	NaN	Mexico	May 17, 2019	TV-MA	Season
16	s17	TV Show	Feb-09	NaN	Shahd El Yaseen, Shaila Sabt, Hala, Hanadi Al-...	NaN	March 20, 2019	TV-14	Season

```
In [62]: df_tvshows["Country"].value_counts().head(1)
```

```
Out[62]: Country
United States    705
Name: count, dtype: int64
```

How can we sort dataset by "Year"?

```
In [63]: df.sort_values(by="year",ascending=False).head(2)
```

Out[63]:	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Dur
5564	s5564	Movie	Sherlock Holmes	Guy Ritchie	Robert Downey Jr., Jude Law, Rachel McAdams, M...	United States, Germany, United Kingdom, Australia	January 1, 2021	PG-13	12
5919	s5919	Movie	Surf's Up	Ash Brannon, Chris Buck	Shia LaBeouf, Jeff Bridges, Zooey Deschanel, J...	United States	January 1, 2021	PG	8

Find the instance where, Category is "Movie" a typr is "Dramas" or Category is "TV Shows" & t is 'Kids' TV'?

```
In [64]: df.head(2)
```

Out[64]:	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	Duration	
0	s1	TV Show	3%	NaN	João Miguel, Bianca Comparato, Michel Gomes, R...	Brazil	August 14, 2020	TV-MA	4 Seasons	I
1	s2	Movie	07:19	Jorge Michel Grau	Demián Bichir, Héctor Bonilla, Oscar Serrano, ...	Mexico	December 23, 2016	TV-MA	93 min	I

In [65]: `df[(df["Category"]=="Movie") & (df["Type"]=="Dramas") | (df["Category"]=="TV`

Out[65]:

	Show_Id	Category	Title	Director	Cast	Country	Release_Date	Rating	D	
	4	s5	Movie	21	Robert Luketic	Jim Sturgess, Kevin Spacey, Kate Bosworth, Aar...	United States	January 1, 2020	PG-13	1
	7	s8	Movie	187	Kevin Reynolds	Samuel L. Jackson, John Heard, Kelly Rowan, Cl...	United States	November 1, 2019	R	1
	170	s171	Movie	A Family Man	Mark Williams	Gerard Butler, Gretchen Mol, Alison Brie, Will...	Canada, United States	December 15, 2019	R	1
	232	s233	Movie	A Stoning in Fulham County	Larry Elikann	Ken Olin, Jill Eikenberry, Maureen Mueller, Gr...	United States	October 1, 2011	TV-14	
	295	s296	Movie	Across Grace Alley	Ralph Macchio	Ben Hyland, Marsha Mason, Karina Smirnoff, Col...	United States	December 1, 2016	TV-PG	
	
	7417	s7416	Movie	Victor	Brandon Dickerson	Patrick Davis, Lisa Vidal, Josh Pence, José Zú...	United States	July 24, 2017	PG-13	1
	7422	s7421	Movie	Villain	Philip Barantini	Craig Fairbrass, George Russo, Robert Gleniste...	United Kingdom	September 5, 2020	R	
	7449	s7448	Movie	VS.	Ed Lilly	Connor Swindells, Fola Evans-Akingbola, Nichol...	United Kingdom	June 19, 2019	TV-MA	
	7465	s7464	Movie	Wakefield	Robin Swicord	Bryan Cranston, Jennifer Garner, Jason O'Mara,...	United States	March 2, 2019	R	1
	7480	s7479	Movie	War Horse	Steven Spielberg	Emily Watson, David Thewlis, Peter Mullan, Nie...	United States, India	May 6, 2019	PG-13	1

117 rows × 15 columns

