Exploration of DISNEY PLUS MOVIES AND TV SHOWS

For data processing I used Pandas and Numpy library.

Also for visualize I used matplotlib and seaborn library.

For nosql dataset use mongodb

In [1]: import sys from pymongo import MongoClient client = MongoClient('mongodb://localhost:27017/') db = client.Project3 collection = db.disney_plus print("Connected to MongoDB Server")

Connected to MongoDB Server

```
In [2]: import numpy
import pandas
import matplotlib.pyplot
import seaborn
import pprint
import jovian
```

TASK

1. Display all movies according to marvel universe timeline irrespective of year they released

In [3]: cursor_4 = collection.find({"rating": {"\$in" : ["PG-13", "PG"]},"country": "India
df = pandas.DataFrame(list(cursor_4))
df.head(17)

	dτ.nead(1/)										
Out[3]:		_id	show_id	type	title	director	cast	country	date_		
	0	627443e6fd923b2544adef08	s1042	Movie	Marvel Studios' Captain America: The First Ave	Joe Johnston	Chris Evans, Tommy Jones, Hugo Weaving, Hayley	India	12-		
	1	627443e6fd923b2544adef0a	s1044	Movie	Marvel Studios' Captain Marvel	Anna Boden, Ryan Fleck	Brie Larson, Samuel Jackson, Ben Mendelsohn, D	India	12-		
	2	627443e6fd923b2544adef0e	s1048	Movie	Marvel Studios' Iron Man	Jon Favreau	Robert Downey Jr., Terrence Howard, Jeff Bridg	India	12-		
	3	627443e6fd923b2544adef0f	s1049	Movie	Marvel Studios' Iron Man 2	Jon Favreau	Robert Downey Jr., Gwyneth Paltrow, Don Cheadl	India	12-		
	4	627443e6fd923b2544adef02	s1036	Movie	Marvel Studios: The Incredible Hulk	Louis Leterrier	Edward Norton, Liv Tyler	India	12-		
	5	627443e6fd923b2544adef12	s1052	Movie	Marvel Studios' Thor	Kenneth Branagh	Chris Hemsworth, Natalie Portman, Tom Hiddlest	India	12-		
	6	627443e6fd923b2544adef11	s1051	Movie	Marvel Studios' The Avengers	Joss Whedon	Robert Downey Jr., Chris Evans, Mark Ruffalo, 	India	12-		
	7	627443e6fd923b2544adef13	s1053	Movie	Marvel Studios' Thor: The Dark World	Alan Taylor	Chris Hemsworth, Natalie Portman, Tom Hiddlest	India	12-		
	8	627443e6fd923b2544adef10	s1050	Movie	Marvel Studios' Iron Man 3	Shane Black	Robert Downey Jr., Gwyneth Paltrow, Don Cheadl	India	12-		

	_id	show_id	type	title	director	cast	country	date_
9	627443e6fd923b2544adef09	s1043	Movie	Marvel Studios' Captain America: The Winter So	Anthony Russo, Joe Russo	Chris Evans, Scarlett Johansson, Sebastian Sta	India	12-
10	627443e6fd923b2544adef0c	s1046	Movie	Marvel Studios' Guardians of the Galaxy	James Gunn	Chris Pratt, Zoë Saldana, Dave Bautista, Vin D	India	12-
11	627443e6fd923b2544adef0d	s1047	Movie	Marvel Studios' Guardians of the Galaxy Vol. 2	James Gunn	Chris Pratt, Bradley Cooper, Vin Diesel, Pom K	India	12-
12	627443e6fd923b2544adef05	s1039	Movie	Marvel Studios' Avengers: Age of Ultron	Joss Whedon	Robert Downey Jr., Chris Hemsworth, Mark Ruffa	India	12-
13	627443e6fd923b2544adef04	s1038	Movie	Marvel Studios' Ant-Man	Peyton Reed	Paul Rudd, Evangeline Lilly, Corey Stoll, Bobb	India	12-
14	627443e6fd923b2544adef07	s1041	Movie	Marvel Studios' Captain America: Civil War	Anthony Russo, Joe Russo	Chris Evans, Robert Downey Jr., Scarlett Johan	India	12-
15	627443e6fd923b2544adef0b	s1045	Movie	Marvel Studios' Doctor Strange	Scott Derrickson	Benedict Cumberbatch, Chiwetel Ejiofor, Rachel	India	12-
16	627443e6fd923b2544adeda4	s686	Movie	Marvel Studios' Thor: Ragnarok	Taika Waititi	Chris Hemsworth, Tom Hiddleston, Cate Blanchet	India	5-

For futher task making copy of data first place curser to make copy of orginal data

```
In [4]: | cursor = collection.find()
        df = pandas.DataFrame(list(cursor))
        df.shape
Out[4]: (1449, 14)
In [5]: disney_plus_df = df.copy()
        removing unwanted column which is not releated to this task
In [6]: disney_plus_df.drop(['director','cast','date_added','country','marvel_t'],axis=1]
In [7]: disney_plus_df['rating']
Out[7]: 0
                 TV-G
        1
                   PG
        2
                 TV-G
        3
                TV-PG
        4
                  NaN
        1444
                   PG
        1445
                PG-13
        1446
                   PG
        1447
                PG-13
        1448
                PG-13
        Name: rating, Length: 1449, dtype: object
In [8]: disney plus df['rating'].replace(numpy.NaN,'TV-13',inplace=True)
In [9]: |disney_plus_df.isnull().sum()
Out[9]: id
                         0
        show_id
                         0
        type
                         0
        title
                         0
                         0
        release_year
        rating
                         0
        duration
                         0
        listed in
                         0
        description
        dtype: int64
        Task 2: Releation between Type(movies or TV shows) and rating
```

In [10]: matplotlib.pyplot.figure(figsize=(10,10))
 seaborn.countplot(x='rating',hue='type', data=disney_plus_df)
 matplotlib.pyplot.title('Relation between Type(movies and tv shows) and their Rat
 matplotlib.pyplot.show();

