Netflix Movies and TV Shows Analysis Report

Objective: -

To extract insights from the Netflix dataset by exploring the distribution of content , type of shows , release trends , ratings, and country contributions .

Tool used:-

Python , Pandas , Matplotlib

Open source application :- Jupyter Notebook
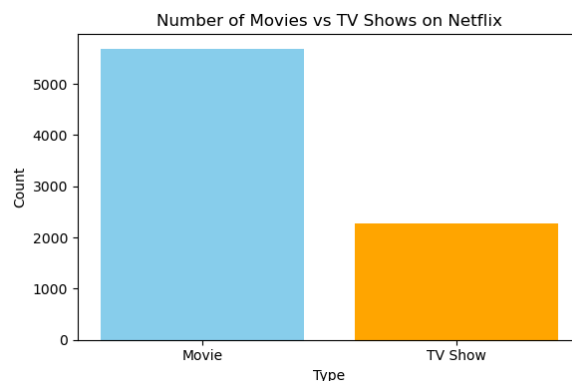
Dataset Link:- ⊕ **Netflix Movies and TV Shows**

Project Link: - netflix_data_visualisation.ipynb

Data Understanding and Cleaning:-

1. Imported dataset using **Pandas.**
2. Used .info() and **.describe()** to understand structure and summary statistics.
3. Check the missing values using **.isnull().sum()**
4. Cleaned "Duration column " to extract only numeric values for movies**(e.g. 90 min - 90)**
5. Drop missing value from the selected columns such as **'type', 'release_year', 'rating', 'country', 'duration'**
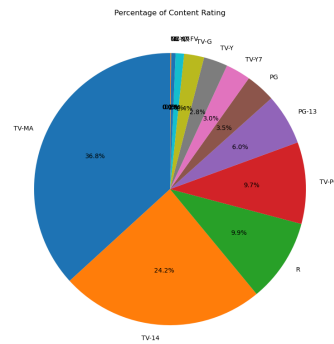6. select **columns** attribute and **shows** functions to check the columns and the size.

Exploratory Data Analysis:-

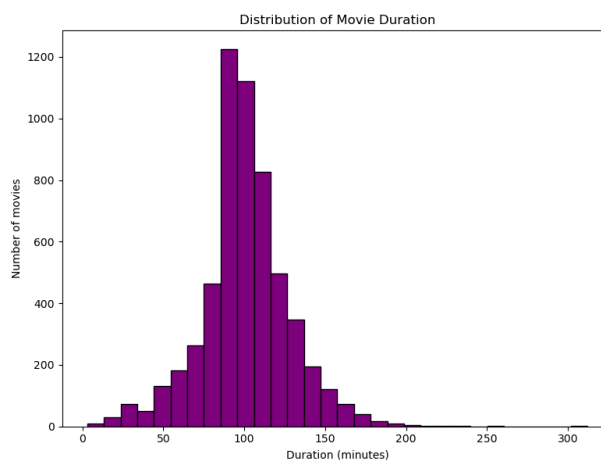## 1.How many movies vs TV Shows ?

observation :- Netflix has more **Movies than TV Shows** , indicating movies dominate the platform's catalog.

2.What is the percentage of each content rating(PG, R, TV-MA)?
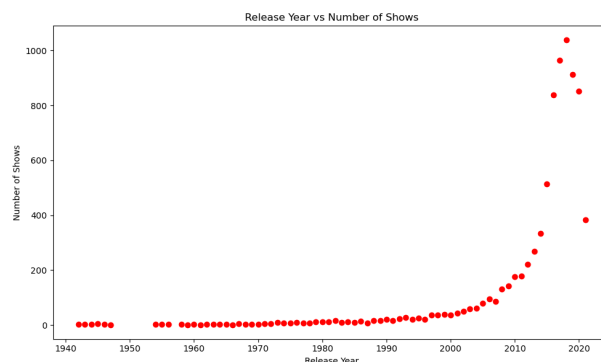

Percentage of Content Rating

observation :- TV-MA (36.8%) shows highest content rating followed by TV-14(24.2%) ,R(9.9%)., suggesting a large amount of **mature and teen - oriented content.**

3.What is the distribution of movie durations ?

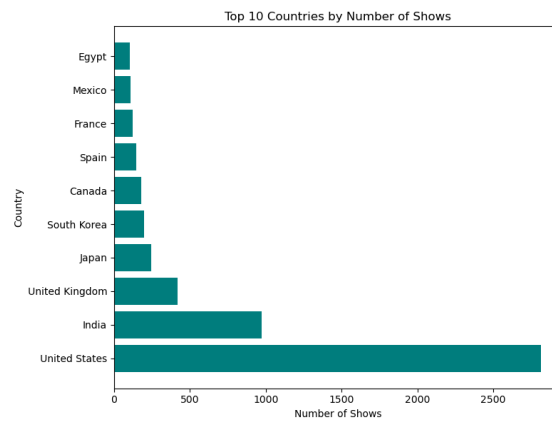Distribution of Movie Duration

Observation:- A large portion of distributed movies have a runtime ranging from **90 to 120** minutes, suggesting this is the most common duration for new releases.

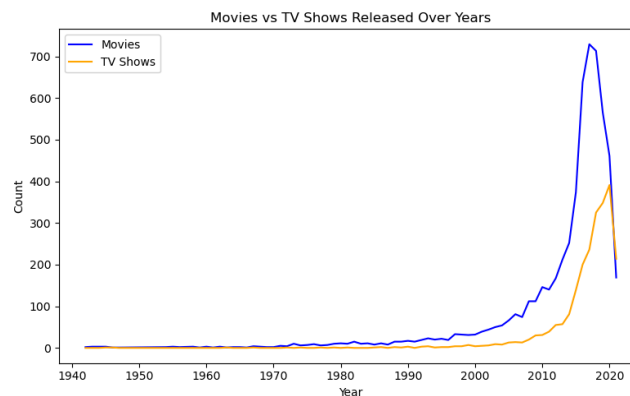## 4.Relationship between release year and number of shows ?

Release Year vs Number of Shows

Observation :- Sharp growth in new releases between **2015-2019**.

5.Top 10 countries with the highest number of shows ?

Top 10 Countries by Number of Shows

Observation:- The **United States** produce the highest number of Netflix titles , followed by **India, United Kingdom, and Japan.**

6.Shows has the number of releases changed over the years ?

Movies vs TV Shows Released Over Years

Observation:- Movie release increased sharply after **2015, peaking around 2018-2019**. **TV Shows have shown steady growth,** reflecting Netflix's investment in series production.

Key Insights :-

1. Netflix's catalog is dominated b**y Movies.**
2. USA and India are the largest content contributors.
3. **TV-MA** rating is most frequent , suggesting mature audience focus.
4. Sharp growth in new release between **2015-2019.**
5. Movie duration clusters around **100 minutes**, the typical feature - length film.

Conclusion :-

Netflix content strategy e**mphasizes movies** and original productions targeting a global audience , especially **adults and young adults**. Recent years have seen **diversification into TV** Shows and international markets like **India ,Korea and Japan.**

Thank you