

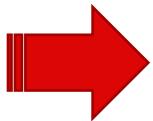
# NETFLIX

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Date: 2022/09





# Questions



How can Netflix retain their subscribers in the way of adding content?

# About dataset

- **Netflix** is one of the most popular media and video streaming platforms.
- They have over **8000 movies or tv shows** available on their platform.
- As of mid-2021, they have over **200M Subscribers** globally.
- This tabular dataset consists of listings of all the movies and tv shows available on Netflix, along with details such as -cast, directors, ratings, release year, duration, etc.

Data source: Kaggle

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

# Data Cleaning

Google Sheet,SQL,Python

# Data Cleaning

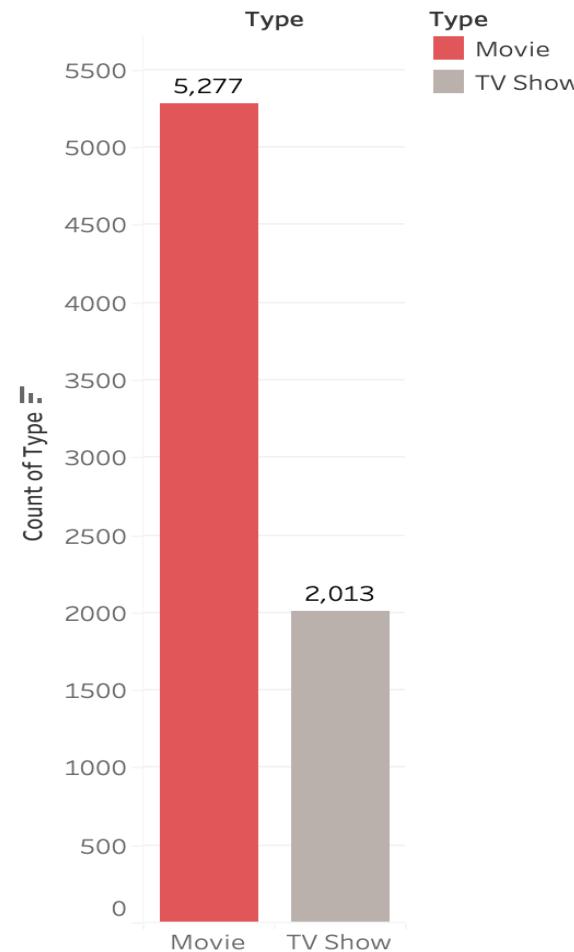
- Remove duplicates & incorrect data
- Check NA
- Change Date format
- Drop the redundant columns
  
- Github:<https://github.com/chongmeiyee/Data-analysis-project-Netflix.git>

# Analyse & Visualization

Python, Tableau

# What type of content is largely added in Netflix?

Movie vs TV show

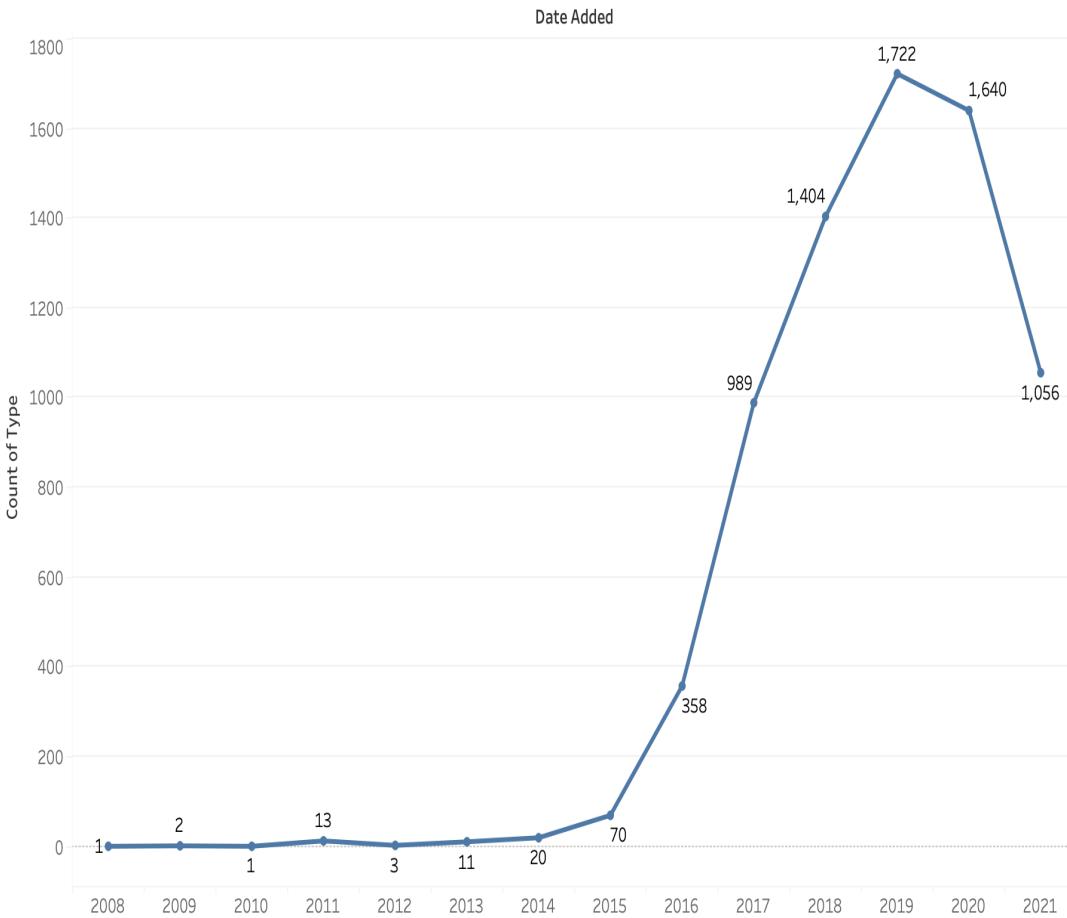


- Compared to TV show, **movie** is largely added in Netflix.
- Movie is about **2.5 times** more than TV show.

每個 Type 的 Type 計數。  
色彩顯示有關 Type 的詳細資訊。

# When is the peak period that Netflix added Movie/TV Shows?

Content added

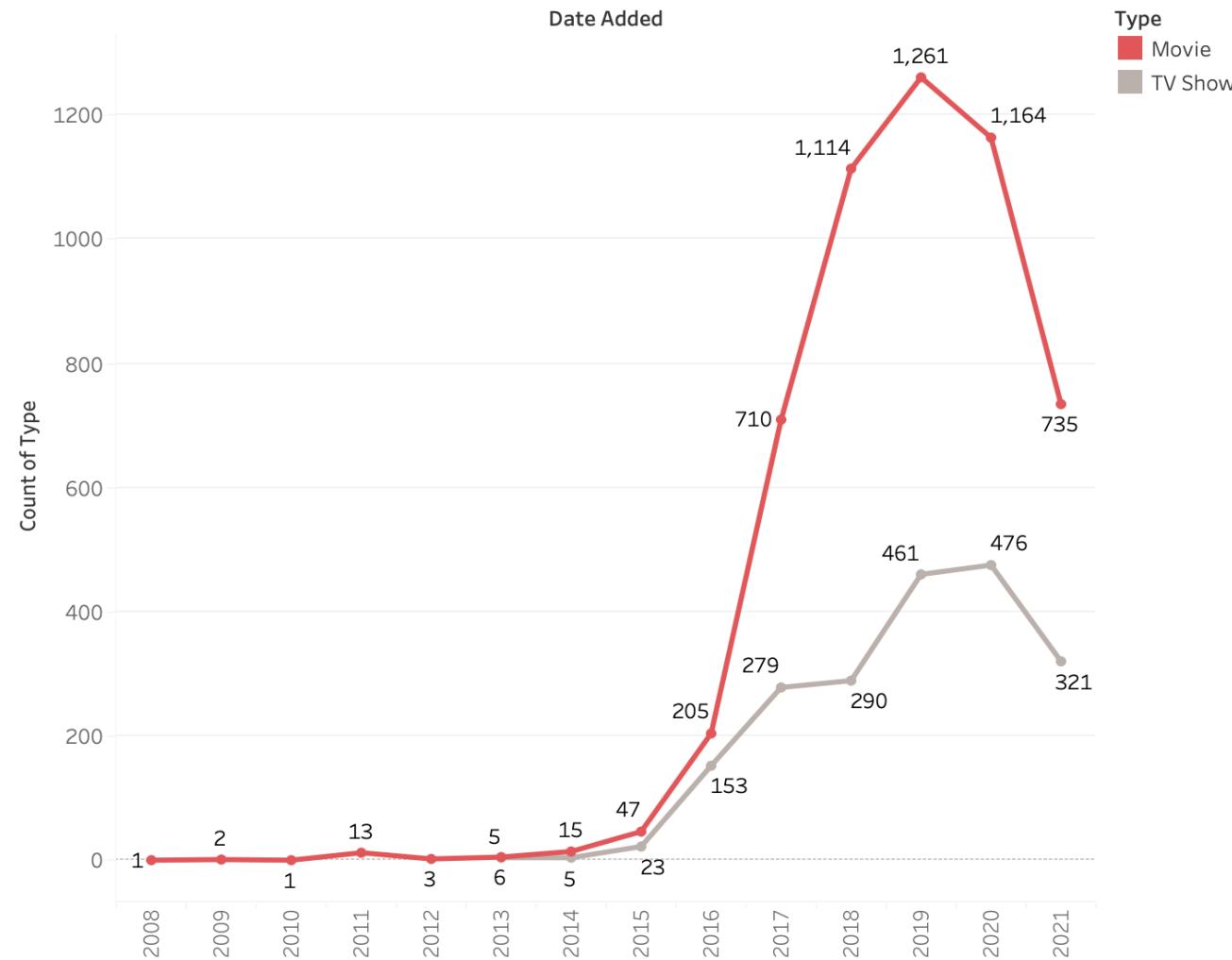


- Lot of content has been added since 2016.
- This trend is continued and reach the peak in 2019.
- Netflix slow down its uploading speed from 2020.

Date Added 年的 Type 計數 的趨勢。

# When is the peak period that Netflix added Movie/TV Shows?

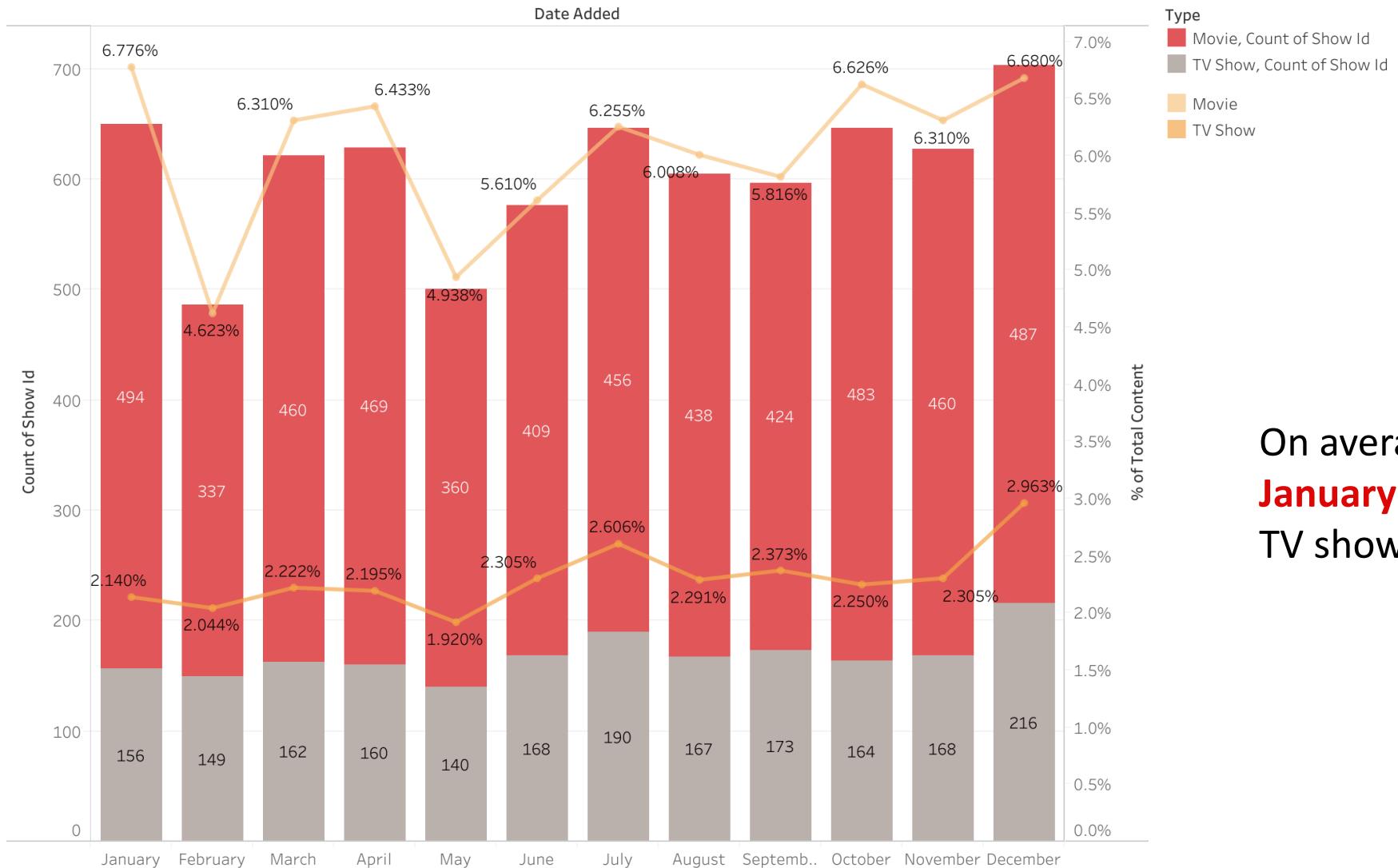
Time series of content added



- Before 2016, the number of these two contents added in Netflix is almost the same.
- The number of movie added become significantly larger than TV show **since 2017**.

# In which month, the content is added the most?

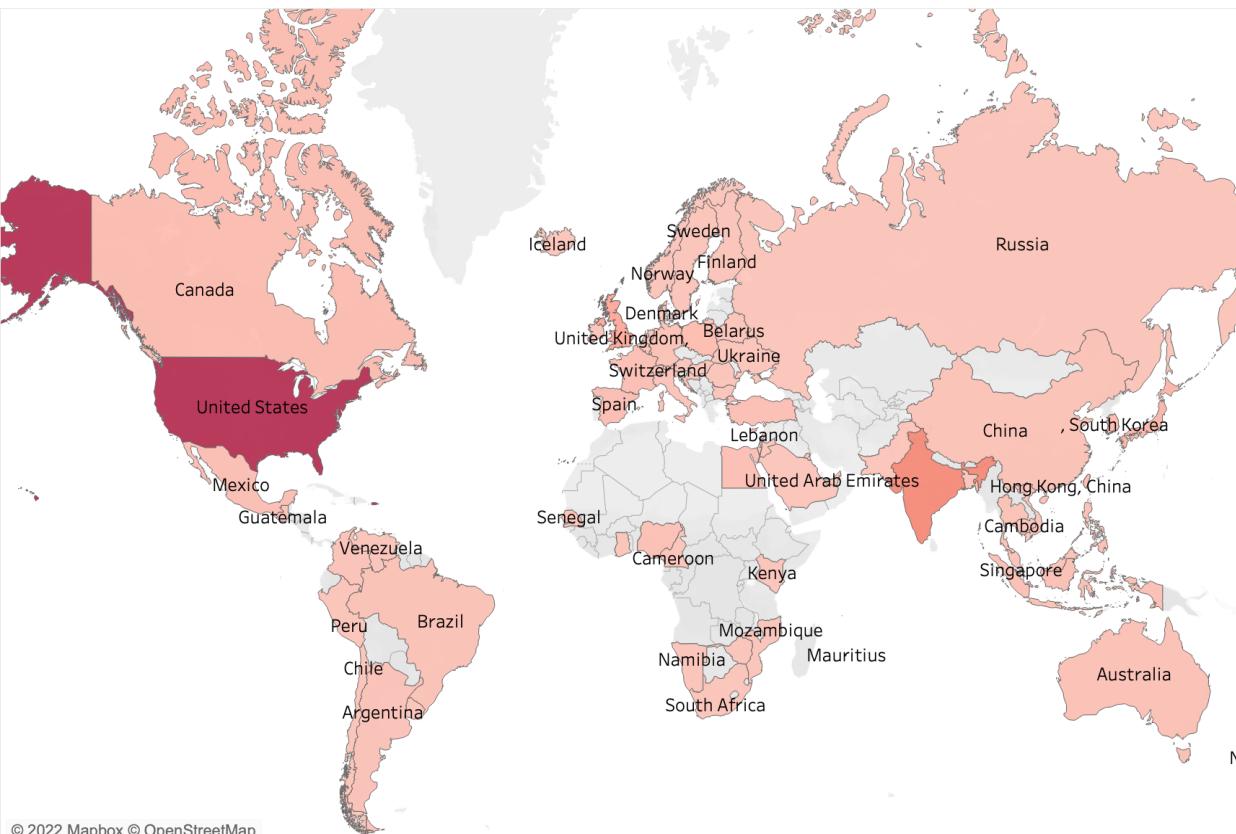
Month with the most content



On average, Netflix added more movie in **January** and **December** while added more TV show in **July** and **December**.

# Which country produce the most Movie/TV show?

Count of type by country

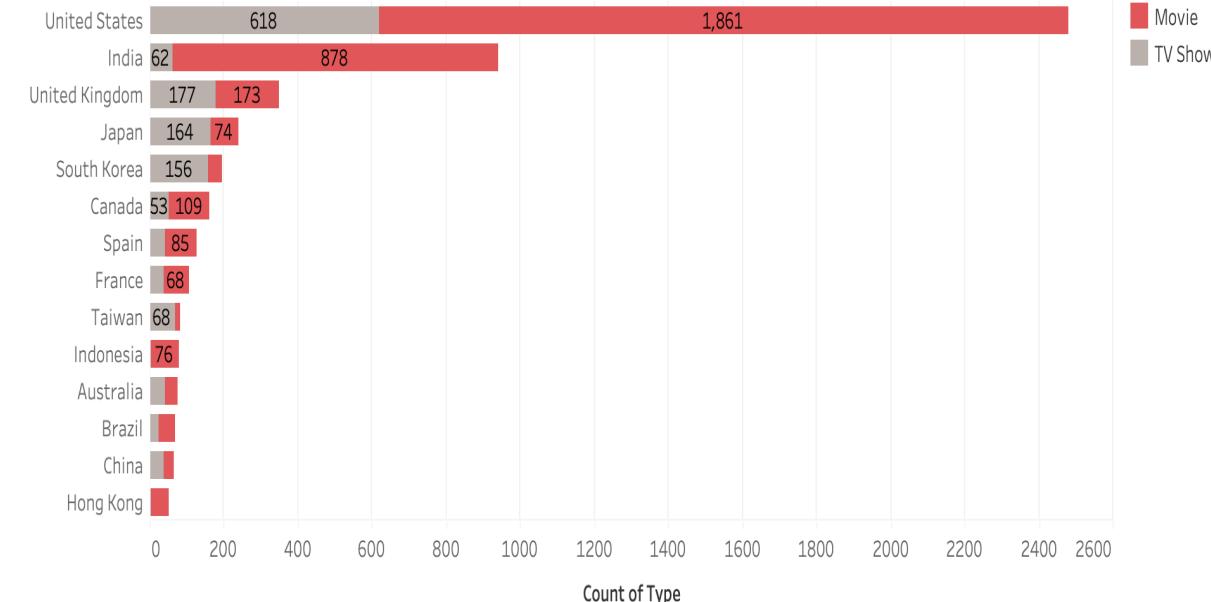


依據經度(產生)和緯度(產生)的地圖。色彩顯示 Type 計數。標記按 Country 進行標記。資料按 Type 進行篩選，這會保留 Movie與TV Show。



Top 10 Country

Country

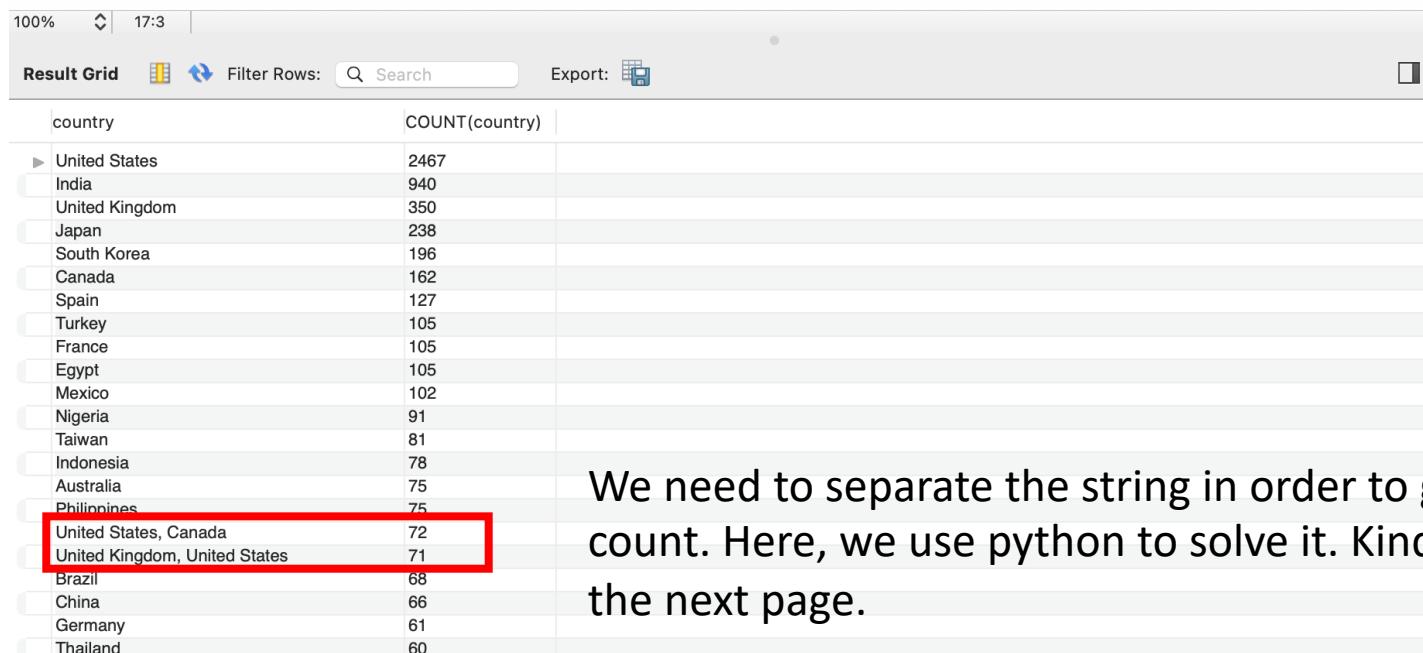


每個 Country 的 Type 計數。色彩顯示有關 Type 的詳細資訊。檢視按 Country 進行篩選，這會保留 14 個成員(總共 689 個)。

Large movie and TV show produced by **United States**, followed by **India** and **United Kingdom**.

# Separate string

```
1 •  SELECT DISTINCT(country), COUNT(country)
2   FROM netflix
3   GROUP BY country|
4   ORDER BY COUNT(country) DESC
5
6
```

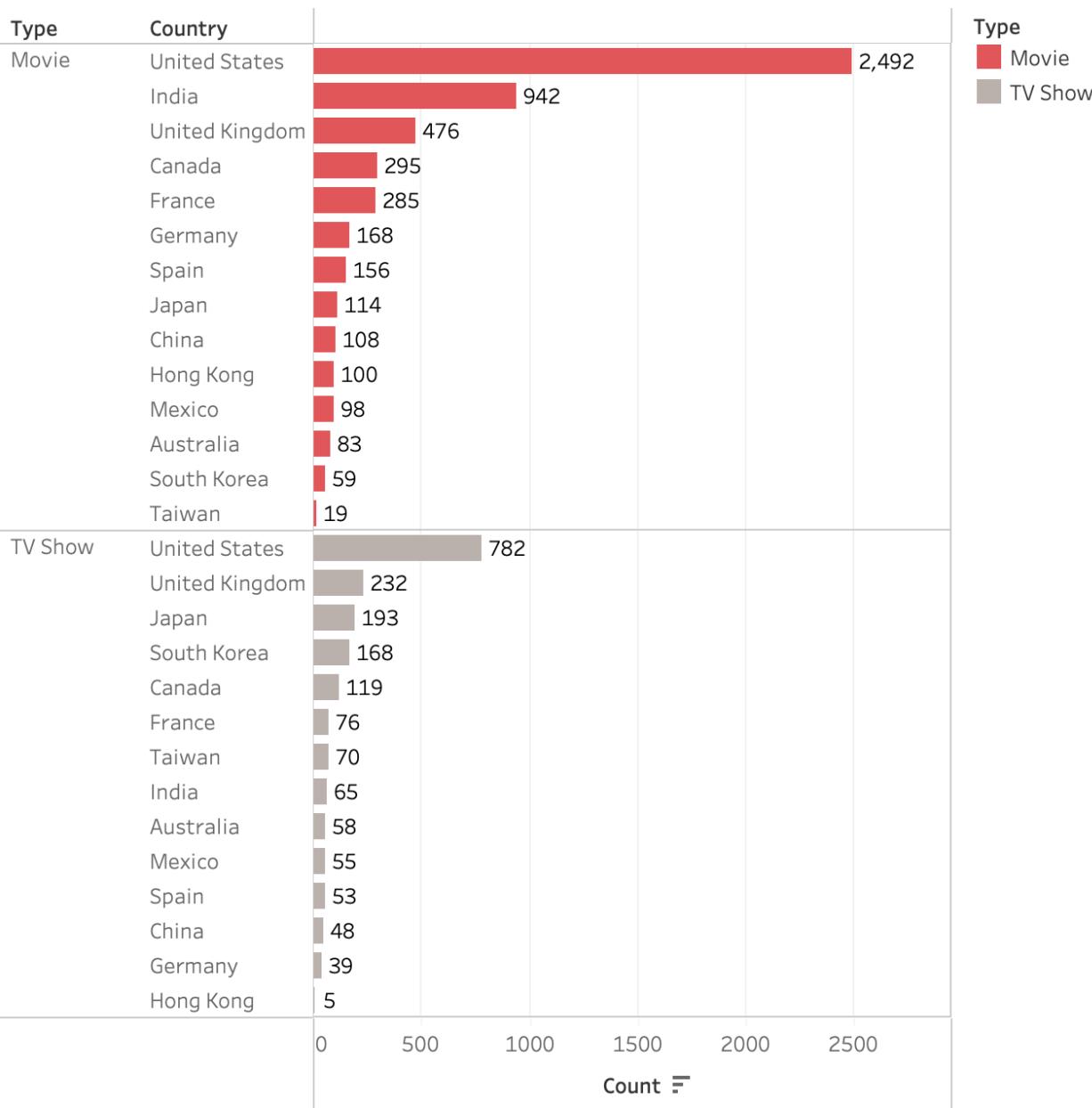


The screenshot shows a database query results grid. The columns are labeled 'country' and 'COUNT(country)'. The data is as follows:

country	COUNT(country)
United States	2467
India	940
United Kingdom	350
Japan	238
South Korea	196
Canada	162
Spain	127
Turkey	105
France	105
Egypt	105
Mexico	102
Nigeria	91
Taiwan	81
Indonesia	78
Australia	75
Philippines	75
United States, Canada	72
United Kingdom, United States	71
Brazil	68
China	66
Germany	61
Thailand	60

We need to separate the string in order to get the actual country count. Here, we use python to solve it. Kindly refer to the result in the next page.

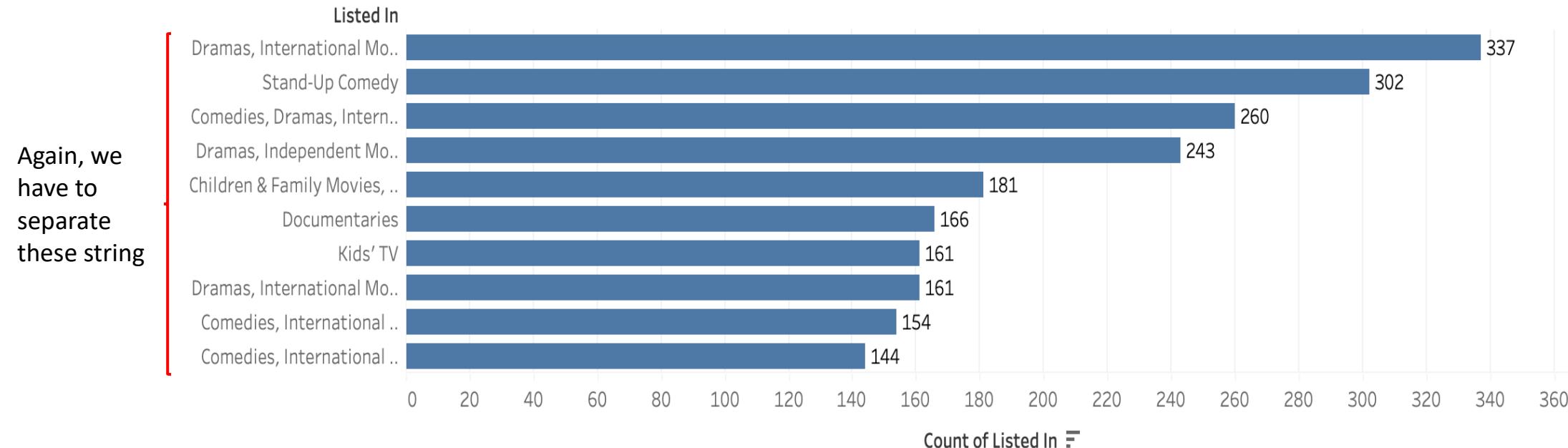
# Country where the movie/TV show was produced



- Most of the movie added in Netflix was produced by **US, UK and India**.
- While TV show was largely from **Japan, South Korea, Canada and Taiwan**.

# What genre of Movie/TV Shows is largely added by Netflix?

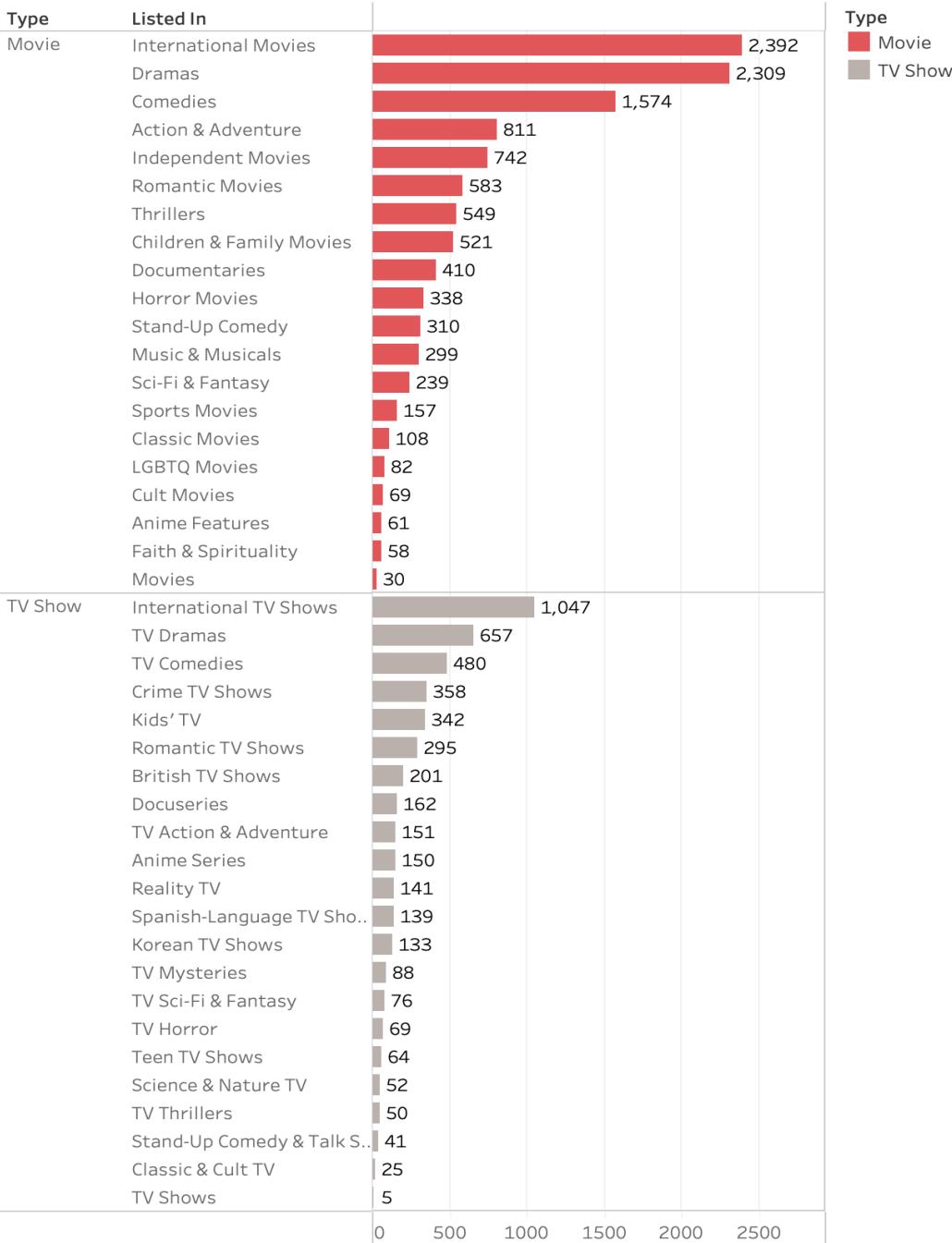
Top 10 Genre



每個 Listed In 的 Listed In 計數。色彩顯示有關 Listed In 不同計數的詳細資訊。檢視按 Listed In 進行篩選，這會保留 10 個成員(總共 489 個)。

Genre such as dramas, international movie and comedies are preferred by Netflix.

## Genre added



- Top 3 genre added in Netflix was similar, which is **International Movies/TV show, Dramas and Comedies**.

- Action & Adventure, Independent and Thrillers is more popular genre in Movie.

- Genre like Crime, Kids, Romantic TV show are more preferred to be added in Netflix.

# Rating

We want to know the popularity of age for Movie/TV show so that we classify the rating of each Movie/TV show into three categories(Kids, Teens, Adults) by using the table below from Netflix website.

## Kids

<b>TV-Y</b>	Designed to be appropriate for all children
<b>TV-Y7</b>	Suitable for ages 7 and up
<b>G</b>	Suitable for General Audiences
<b>TV-G</b>	Suitable for General Audiences
<b>PG</b>	Parental Guidance suggested
<b>TV-PG</b>	Parental Guidance suggested

## Teens

<b>PG-13</b>	Parents strongly cautioned. May be Inappropriate for ages 12 and under.
<b>TV-14</b>	Parents strongly cautioned. May not be suitable for ages 14 and under.

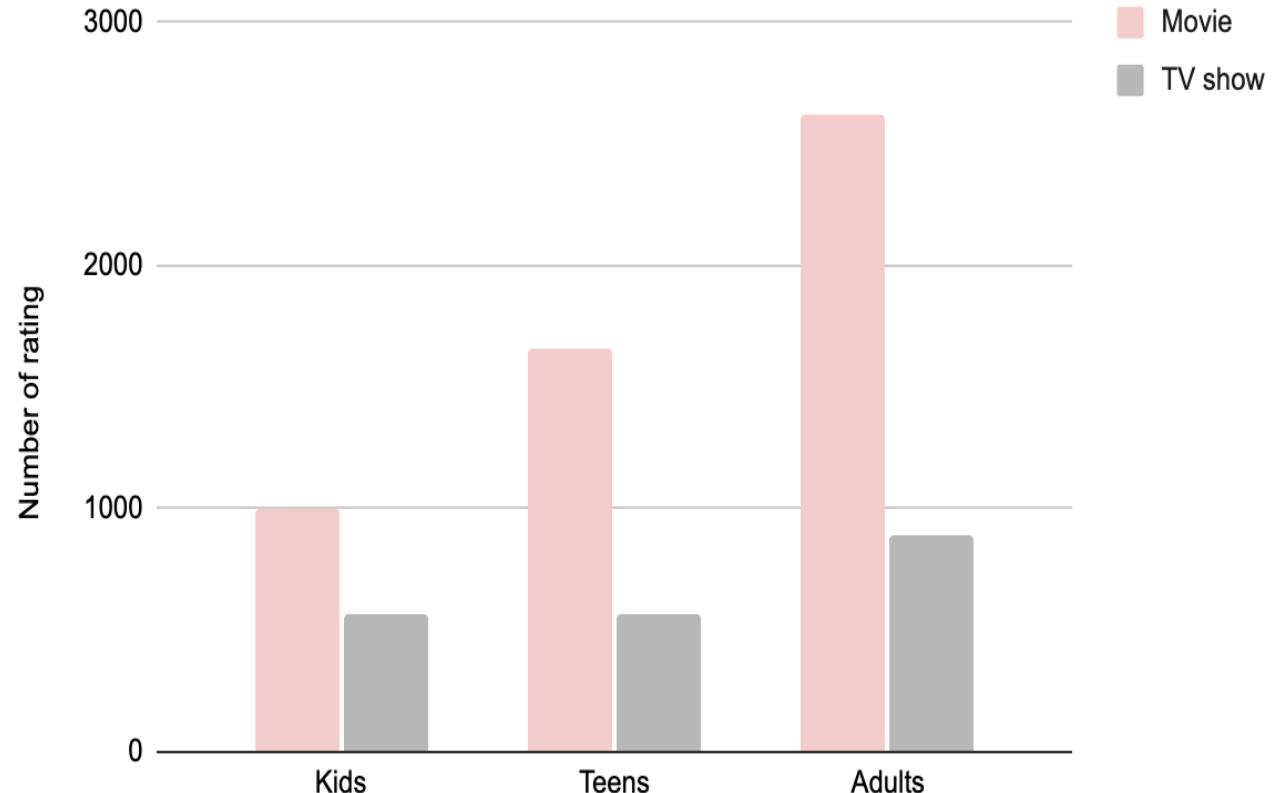
## Adults

<b>R</b>	Restricted. May be inappropriate for ages 17 and under.
<b>TV-MA</b>	For Mature Audiences. May not be suitable for ages 17 and under.
<b>NC-17</b>	Inappropriate for ages 17 and under

# Rating Count

	A	B	C	D	E	F	G
1	type	rating	COUNTA of rating				
2	Movie	G	40				
3		NC-17	3				
4		NR	58				
5		PG	275	Movie			
6		PG-13	470	Kids	998		
7		R	778	Teens	1661		
8		TV-14	1191	Adults	2618		
9		TV-G	90		5277		
10		TV-MA	1776				
11		TV-PG	430				
12		TV-Y	80				
13		TV-Y7	80				
14		TV-Y7-FV	3				
15		UR	3				
16	Movie Total		5277				
17	TV Show	NR	4				
18		R	1	TV show			
19		TV-14	564	Kids	563		
20		TV-G	68	Teens	564		
21		TV-MA	881	Adults	886		
22		TV-PG	223		2013		
23		TV-Y	129				
24		TV-Y7	142				
25		TV-Y7-FV	1				
26							
27	Grand Total		2013				
28			7290				

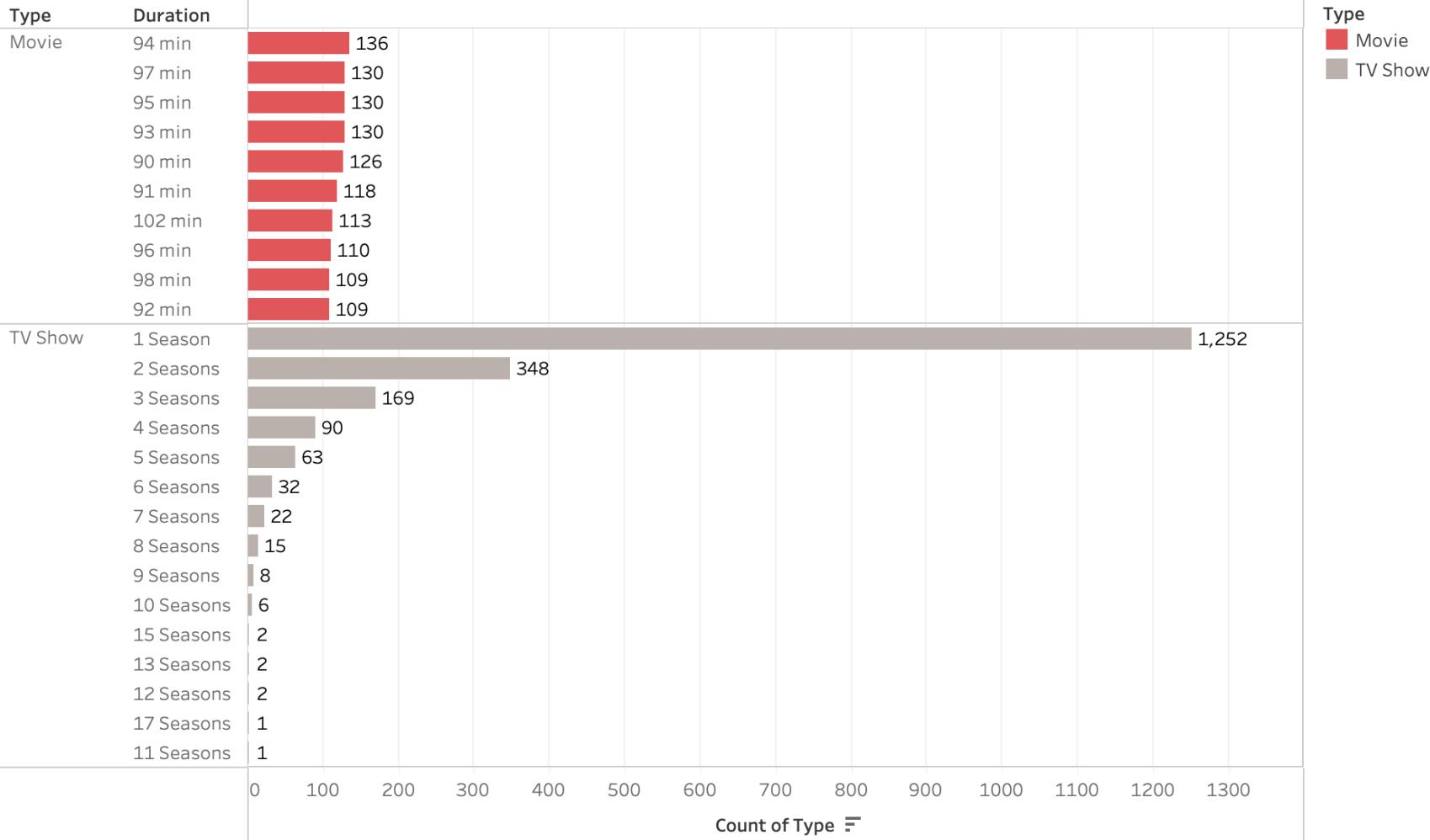
Rating Count for each content



Netflix added lots of movie/TV show that suitable for **adults**.

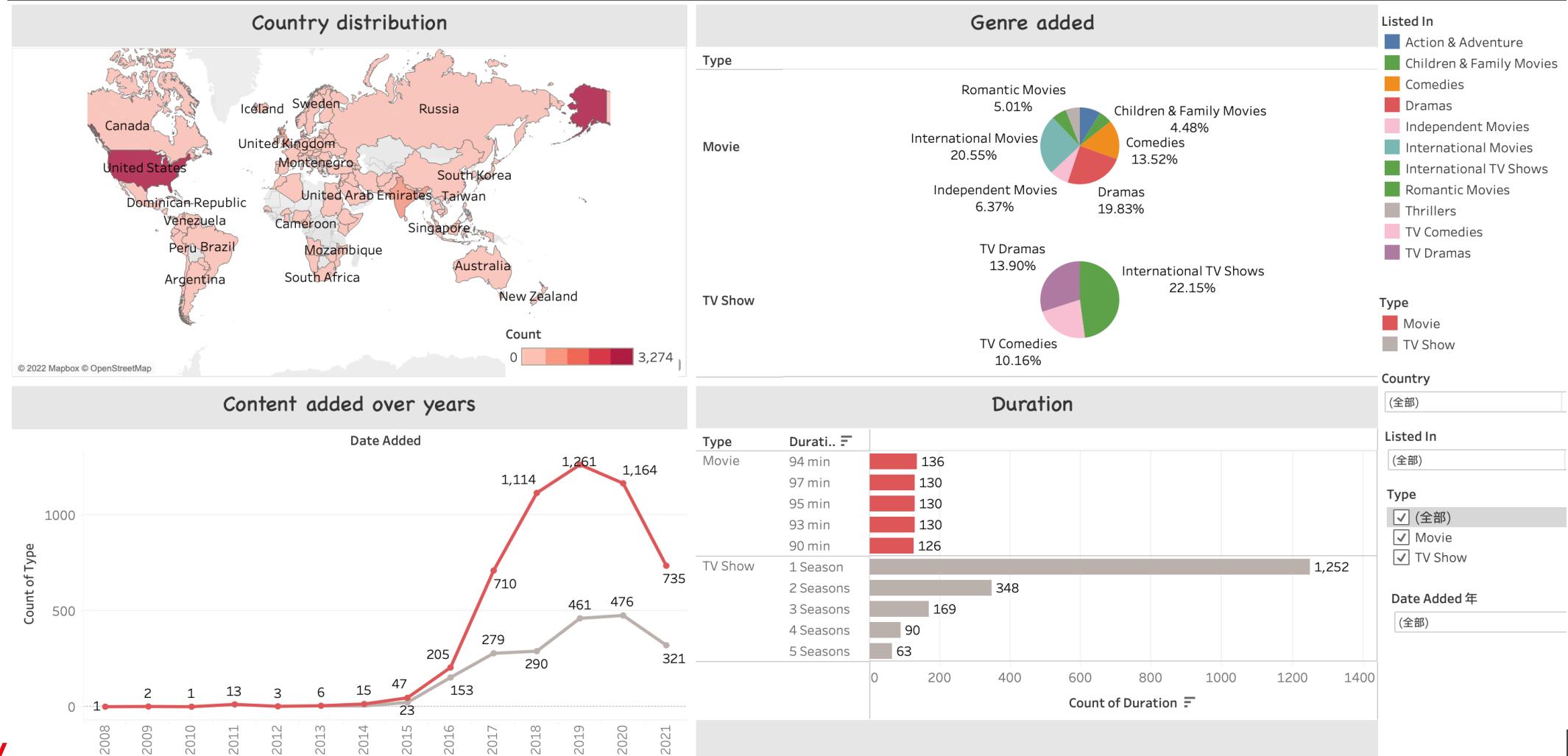
# The duration of Movie/TV show in Netflix

Count of duration by type



- Most of the movie durations are around **90 to 102 minutes**.
- There are a lot of TV shows lasted for **1 season**.

# Dashboard



# Summary

- Netflix added **more movie** than TV show.
- The number of content added start to decrease from 2019. (Covid or subscription decrease?)

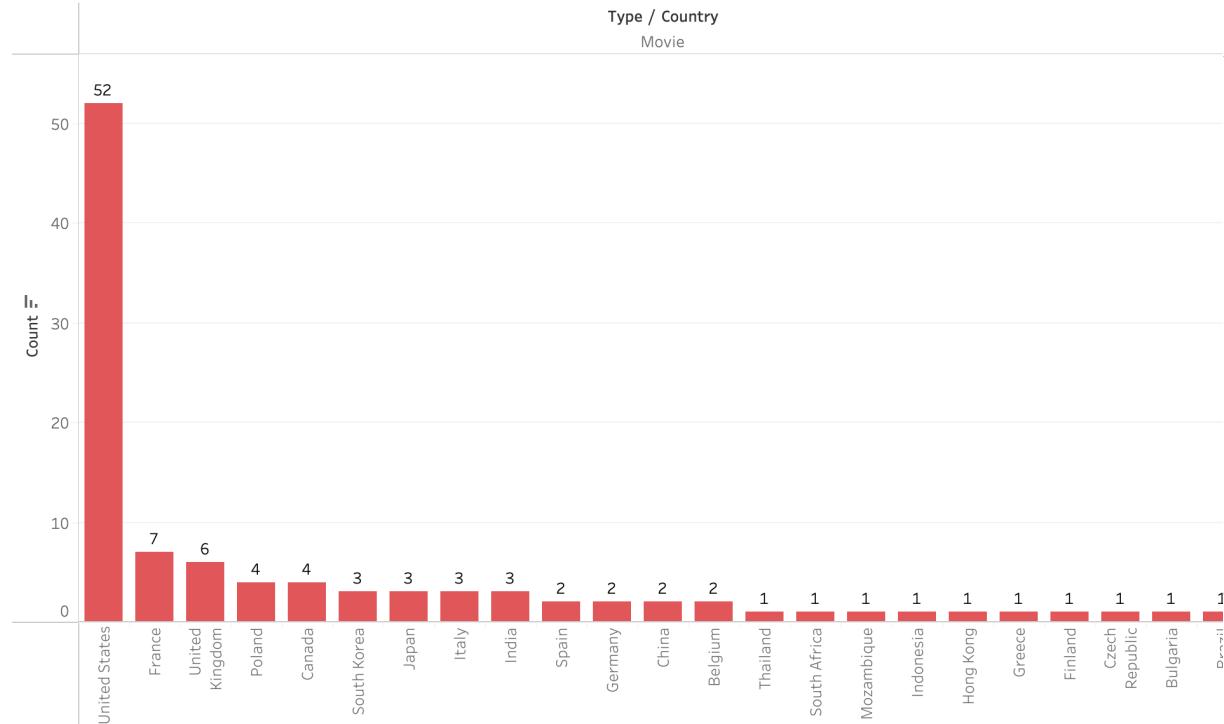
	Movie	TV show
<b>Country</b>	US, India, UK, Canada, France	US, UK, Japan, South Korea, Canada
<b>Genre</b>	International Movies, Dramas and Comedies	International TV Shows, TV Dramas and TV Comedies
<b>Rating (appropriate age)</b>	Kids<Teens<Adults	Kids<Teens<Adults
<b>Duration</b>	Around 100 minutes	1 season

# Top 10 Movie/TV show

- Data source: <https://top10.netflix.com>
- Global lists
- We then merge the data to get the top 10 lists info, such as genre.
- The dataset left for 169 rows.

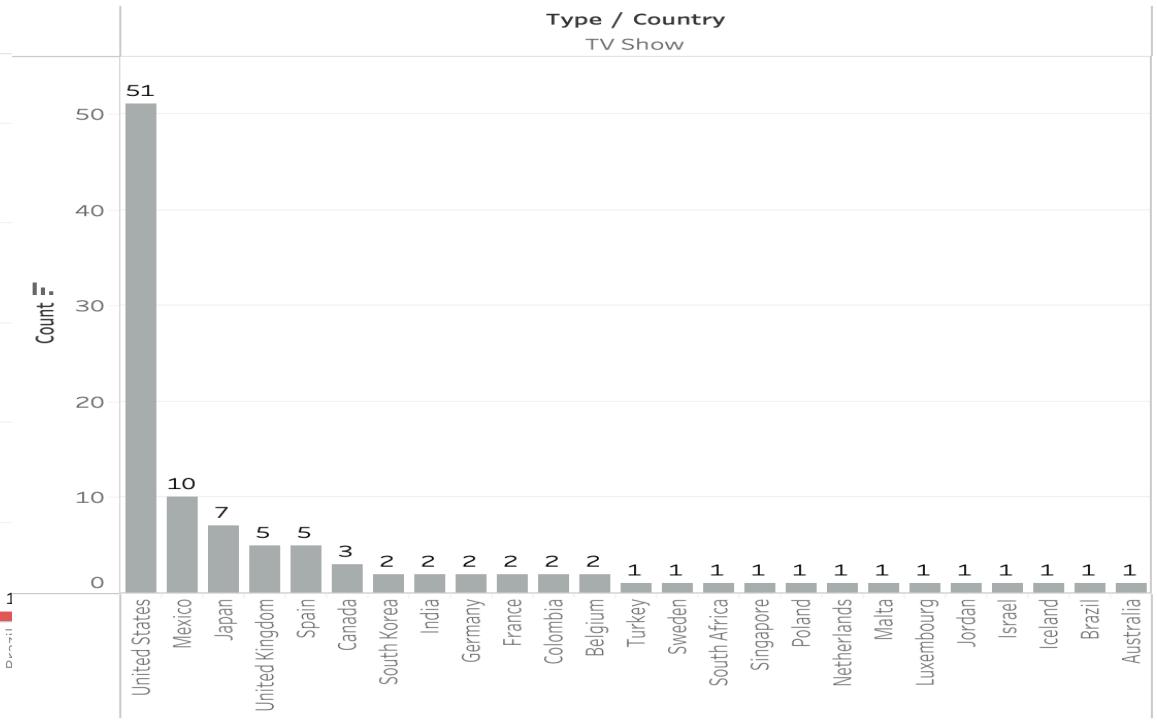
# Top 10-Country

Top 10 Movie



每個 Country 的按 Type 細分的 Count 總和。檢視按 Type 進行篩選，這會保留 Movie。

Top 10 TV Show

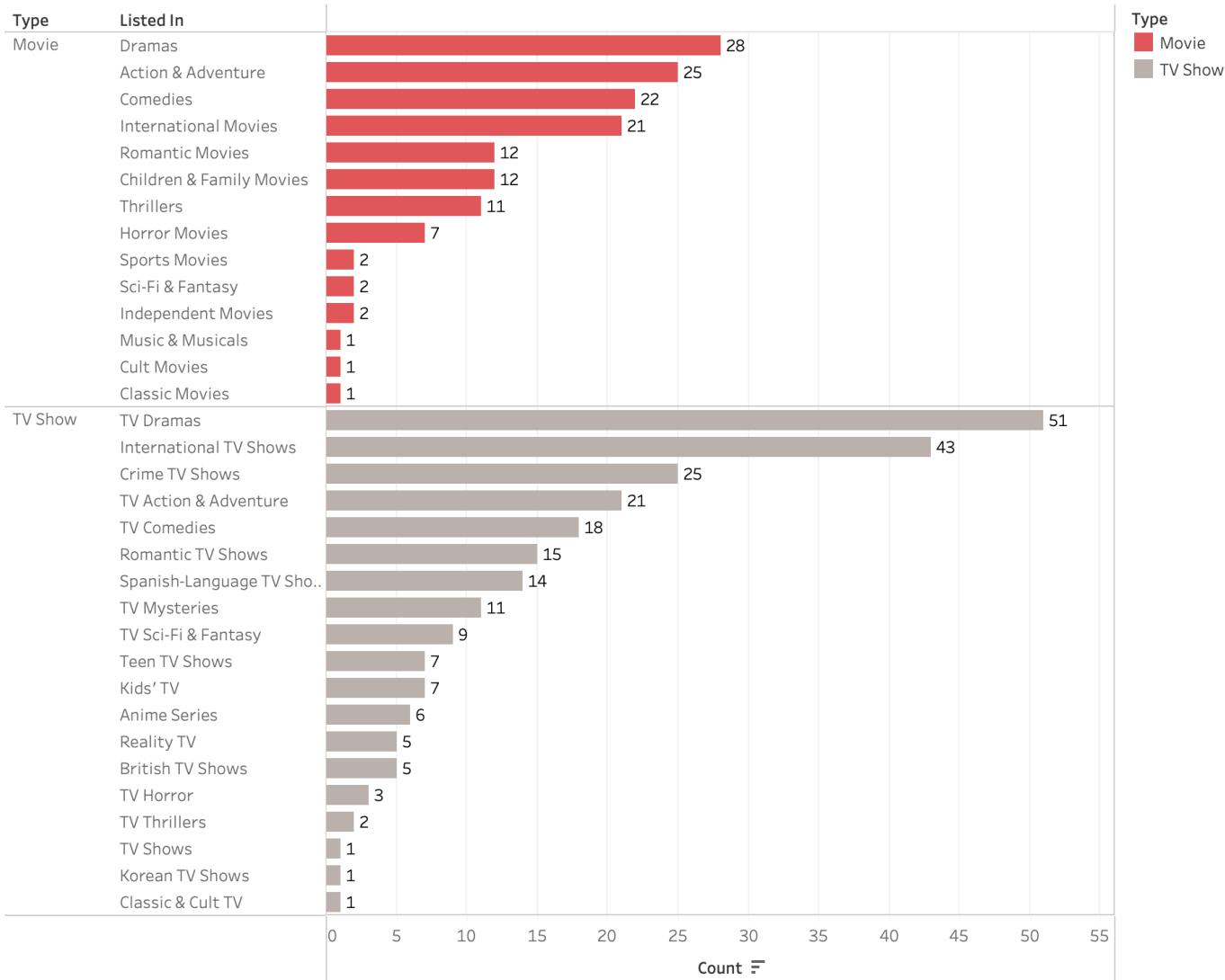


每個 Country 的按 Type 細分的 Count 總和。在 Type 與 Country 上篩選檢視。Type 篩選條件保留 TV Show。Country 篩選條件排除 Null。

Most of the popular movies/TV shows are come from **United States**.

# Top 10-Genre

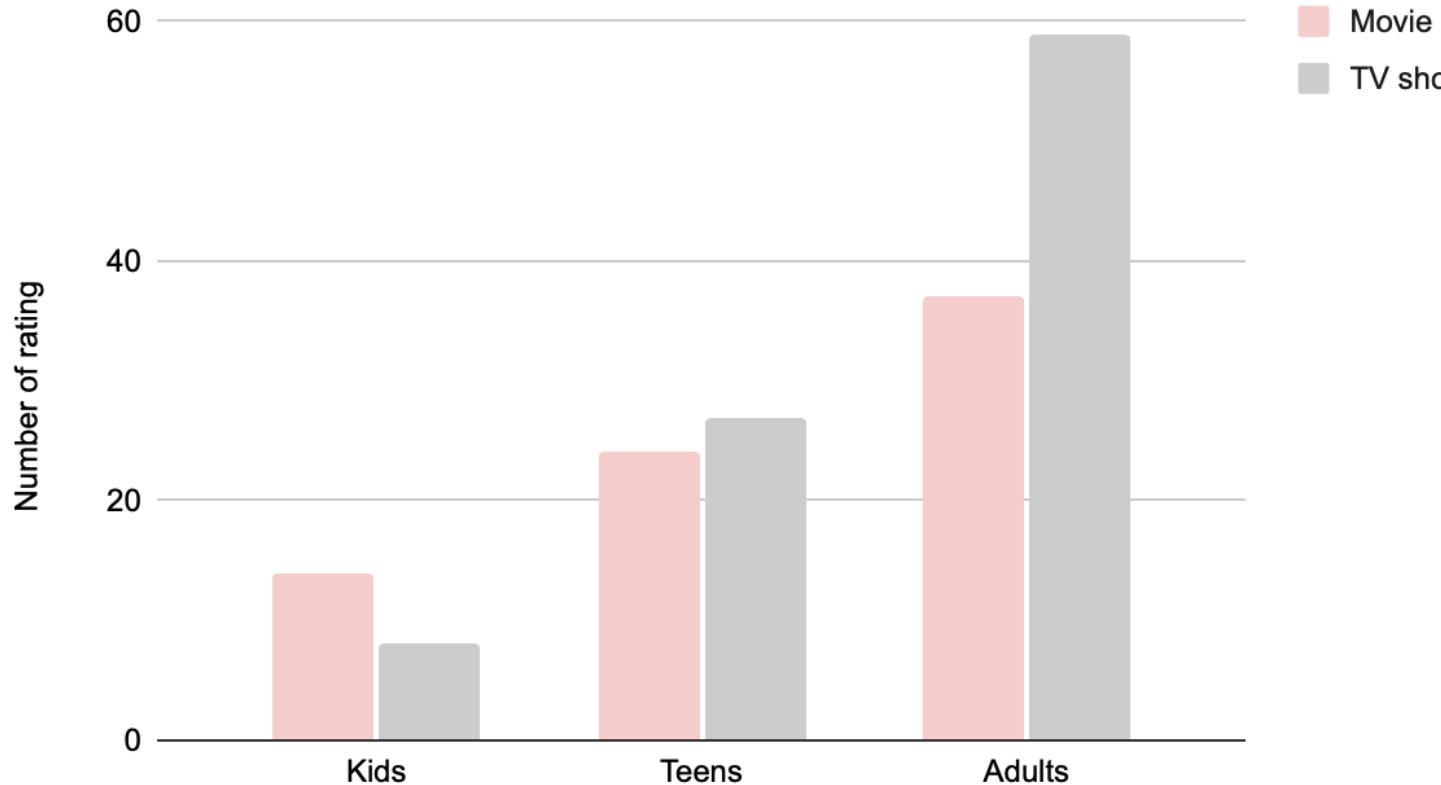
Popular Genre



- Most of the people like movie such as **dramas, action&adventure** and **comedies**.
- While in the TV show, people like **TV dramas, international TV shows** and **crime TV shows**.

# Top 10 Rating

Rating count for each content

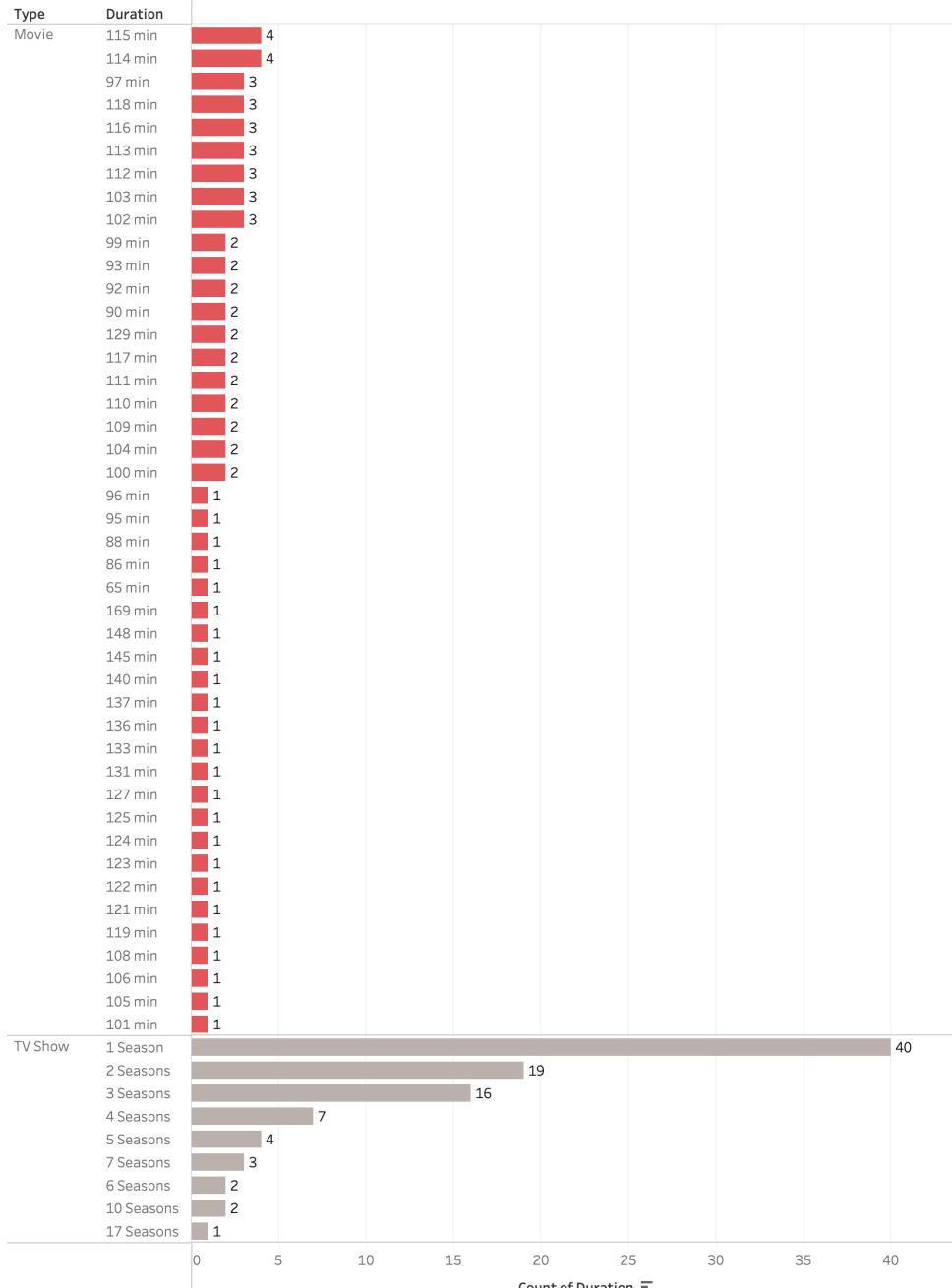


The movie and TV show of Top 10 lists are suitable for **adults**.

# Top 10-Duration

- There are lot of movies in Top 10 lists around **100 minutes**.
- Most of the people like to watch **1-3 seasons** TV show in Netflix.

Popular Duration



# Recommendations

To sum up, Netflix can add these kind of movie/TV show in order to retain their subscribers.

	Movie	TV show
Country	US, France, UK	US, Mexico, Japan
Genre	Dramas, Action&Adventure and Comedies.	TV Dramas, International TV shows and Crime TV shows.
Rating (appropriate age)	Kids<Teens<Adults	Kids<Teens<Adults
Duration	Around 100 minutes	1-3seasons