

In [61]:
`import numpy as npimport pandas as pdimport matplotlib.pyplot as plt import seaborn as sns`
`df = pd.read_csv('netflix.csv', encoding='latin1')``print(type(df))`
<class 'pandas.core.frame.DataFrame'>

In [62]:
`df`

Out[62]:

	show_id	type	title	director	cast	country	date_added	release_year	rating	duration	listed_in	description
0	s8	Movie	Sankofa	Haile Gerima	Kofi Ghanaba, Oyafunmike Ogunlano, Alexandra D...	United States, Ghana, Burkina Faso, United Kin...	24-Sep-21	1993	TV-MA	125 min	Dramas, Independent Movies, International Movies	On a photo shoot in Ghana, an American model s...
1	s9	TV Show	The Great British Baking Show	Andy Devonshire	Mel Giedroyc, Sue Perkins, Mary Berry, Paul Ho...	United Kingdom	24-Sep-21	2021	TV-14	90 min	British TV Shows, Reality TV	A talented batch of amateur bakers face off in...
2	s10	Movie	Jaws 0	Theodore Melfi	Melissa McCarthy, Chris O'Dowd, Kevin Kline, T...	United States	24-Sep-21	2021	PG-13	104 min	Comedies, Dramas	A woman adjusting to life after a loss contend...
3	s13	Movie	Jaws: The Revenge	Christian Schwochow	Luna Wedler, Jannis NiewÄhner, Milan Peschel,...	Germany, Czech Republic	23-Sep-21	2021	TV-MA	127 min	Dramas, International Movies	After most of her family is murdered in a terr...
4	s25	Movie	Safe House	S. Shankar	Prashanth, Aishwarya Rai Bachchan, Sri Lakshmi...	India	21-Sep-21	1998	TV-14	166 min	Comedies, International Movies, Romantic Movies	When the father of the man she loves insists t...
...
995	s1921	Movie	The Book of Sun	Faris Godus	Baraa Alem, Ismail Alhassan, Ahmed Saddam, Soh...	Saudi Arabia	1-Oct-20	2020	TV-14	120 min	Comedies, Independent Movies, International Mo...	A high school senior sets out to make a no-bud...
996	s1922	Movie	The Outpost	Rod Lurie	Scott Eastwood, Caleb Landry Jones, Orlando Bl...	United States, Bulgaria	1-Oct-20	2020	R	123 min	Action & Adventure, Dramas	A group of vastly outnumbered U.S. soldiers at...
997	s1925	Movie	We Have Always Lived in the Castle	Stacie Passon	Taissa Farmiga, Alexandra Daddario, Crispin Gl...	United States	1-Oct-20	2018	TV-14	95 min	Dramas, Thrillers	The fragile and secretive world of two sisters...
998	s1928	Movie	Baxu and the Giants	Florian Schott	Camilla Jo-Ann Daries, Wafeeq Narimab, Anna Lo...	Namibia	30-Sep-20	2019	TV-PG	29 min	Dramas, International Movies	A young girl grows increasingly concerned abou...
999	s1931	Movie	Poacher	Tom Whitworth	Brian Ogola, Davina Leonard, Shiviske Shivisi,...	United Kingdom, Kenya	30-Sep-20	2018	TV-MA	28 min	Dramas, International Movies, Thrillers	A daring farmer steals illicit ivory from a gr...

1000 rows × 12 columns
In [63]:
`df=df.dropna()`

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

Out[64]:

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1000 rows × 12 columns
In [50]:
`df['release_year'] = df['release_year'].astype(int)`

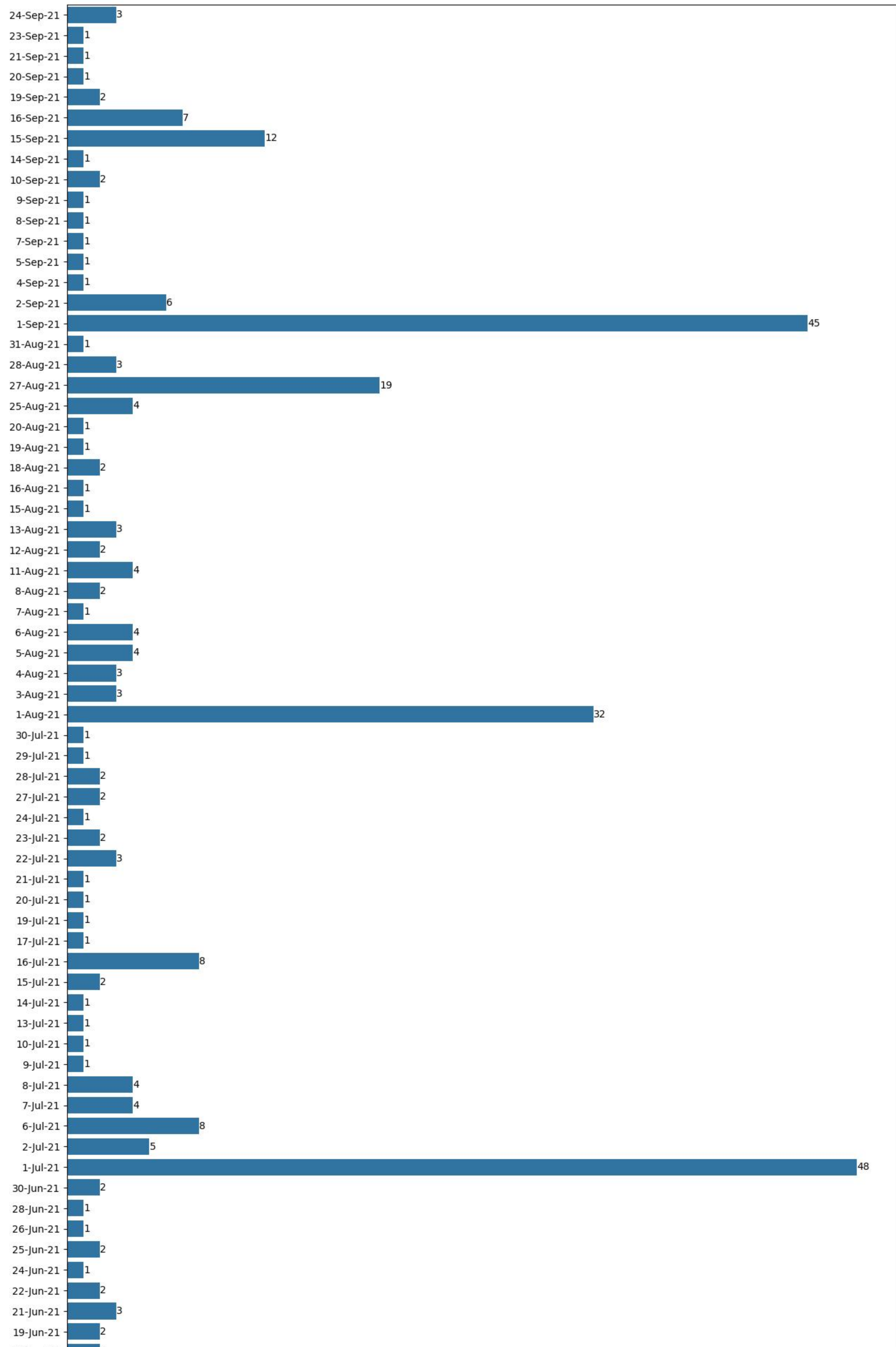
In [51]:
`df.head()`

Out[51]:

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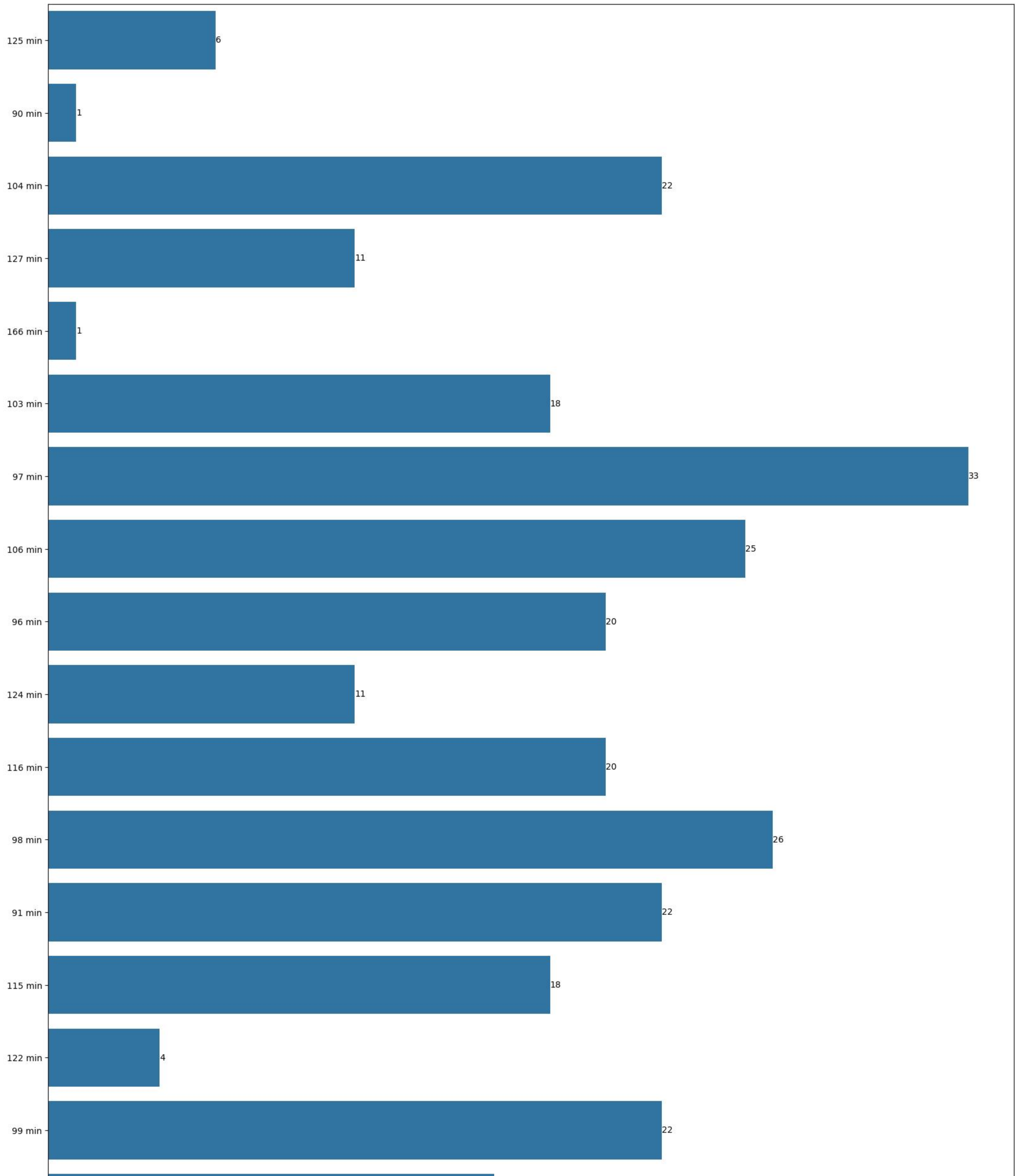
```
In [52]:
df.to_csv('netflix.csv', encoding='latin1')

In [82]:
plt.figure(figsize=(15,100))x1 = sns.countplot(y = 'date_added' , data = df)for bars in x1.containers:
    x1.bar_label(bars)plt.show()
```



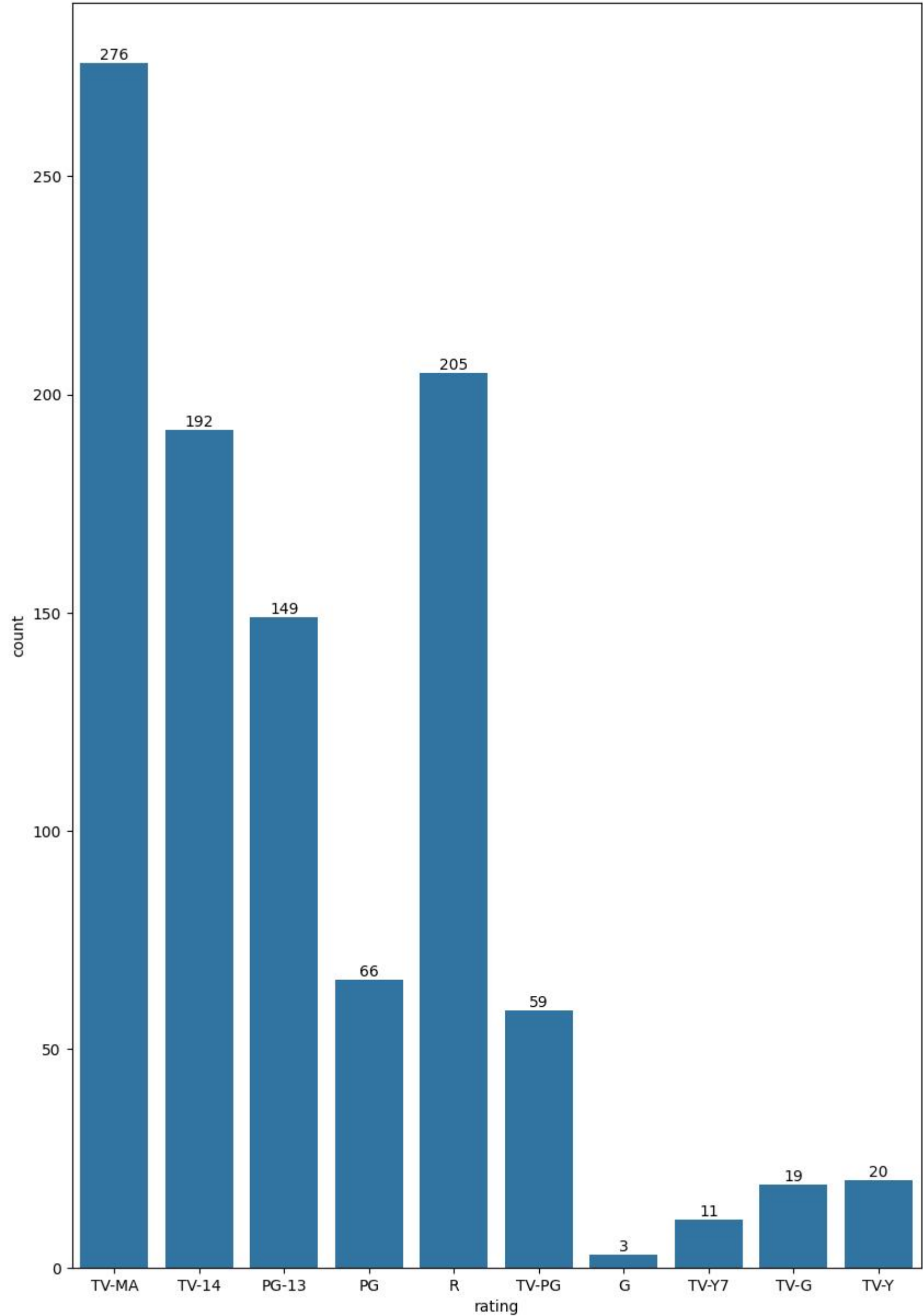
By this graph we can conclude the most no of shows where released on netflix on 1 july 2021 and total was 48 .

```
In [80]:
plt.figure(figsize=(20,200))x1 = sns.countplot(y = 'duration' , data = df)for bars in x1.containers:
    x1.bar_label(bars)plt.show()
```



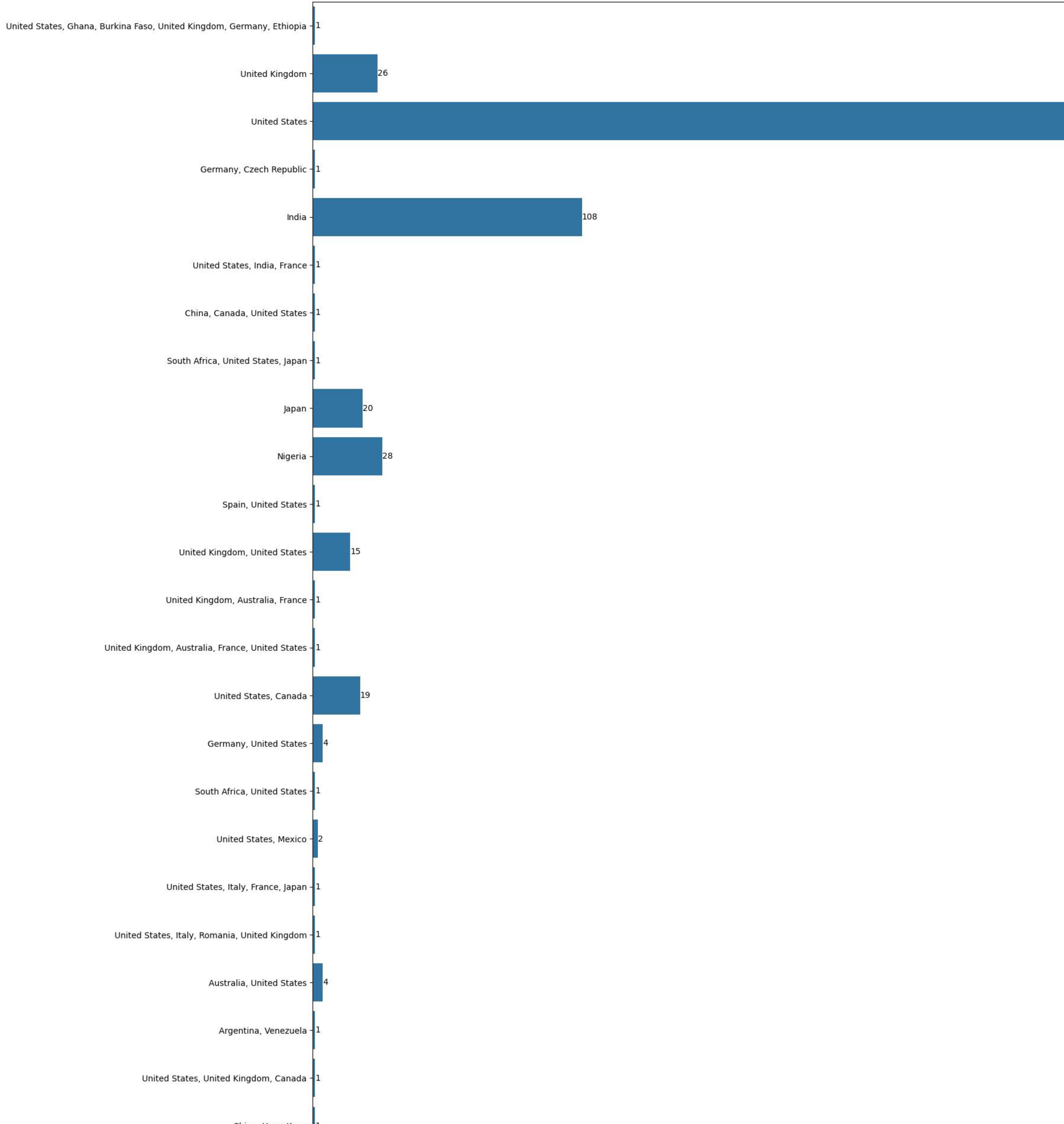
In this graph we can simply see that 33 shows are highest in time of 101 min

```
In [73]:
plt.figure(figsize=(10,15))x1 = sns.countplot(x = 'rating' , data = df)for bars in x1.containers:
    x1.bar_label(bars)plt.show()
```



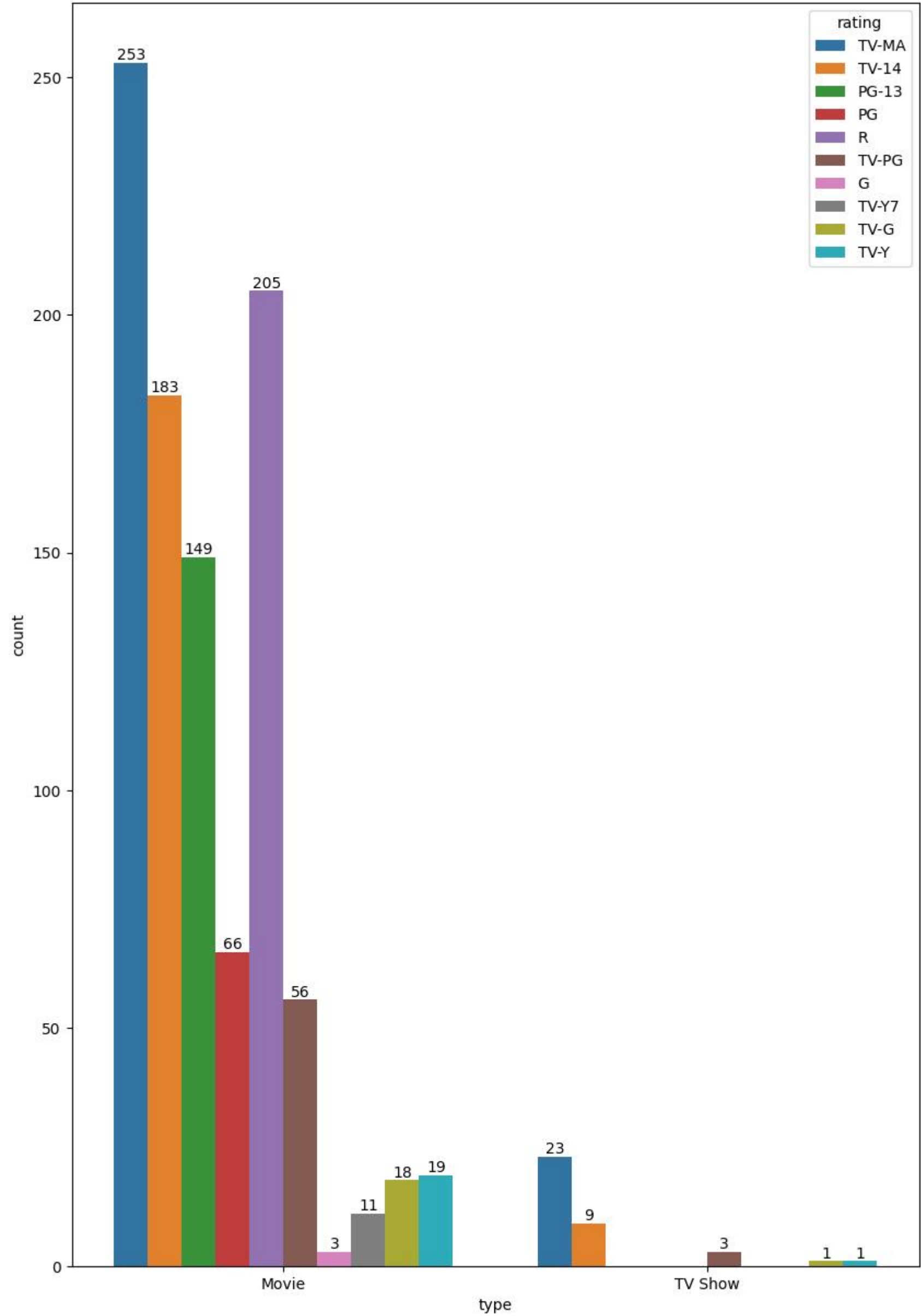
By this graph we can conclude that the most watched shows have rating of TV-MA which is 276 in no

```
In [79]:
plt.figure(figsize=(20,200))x1 = sns.countplot(y = 'country' , data = df)for bars in x1.containers:
    x1.bar_label(bars)plt.show()
```

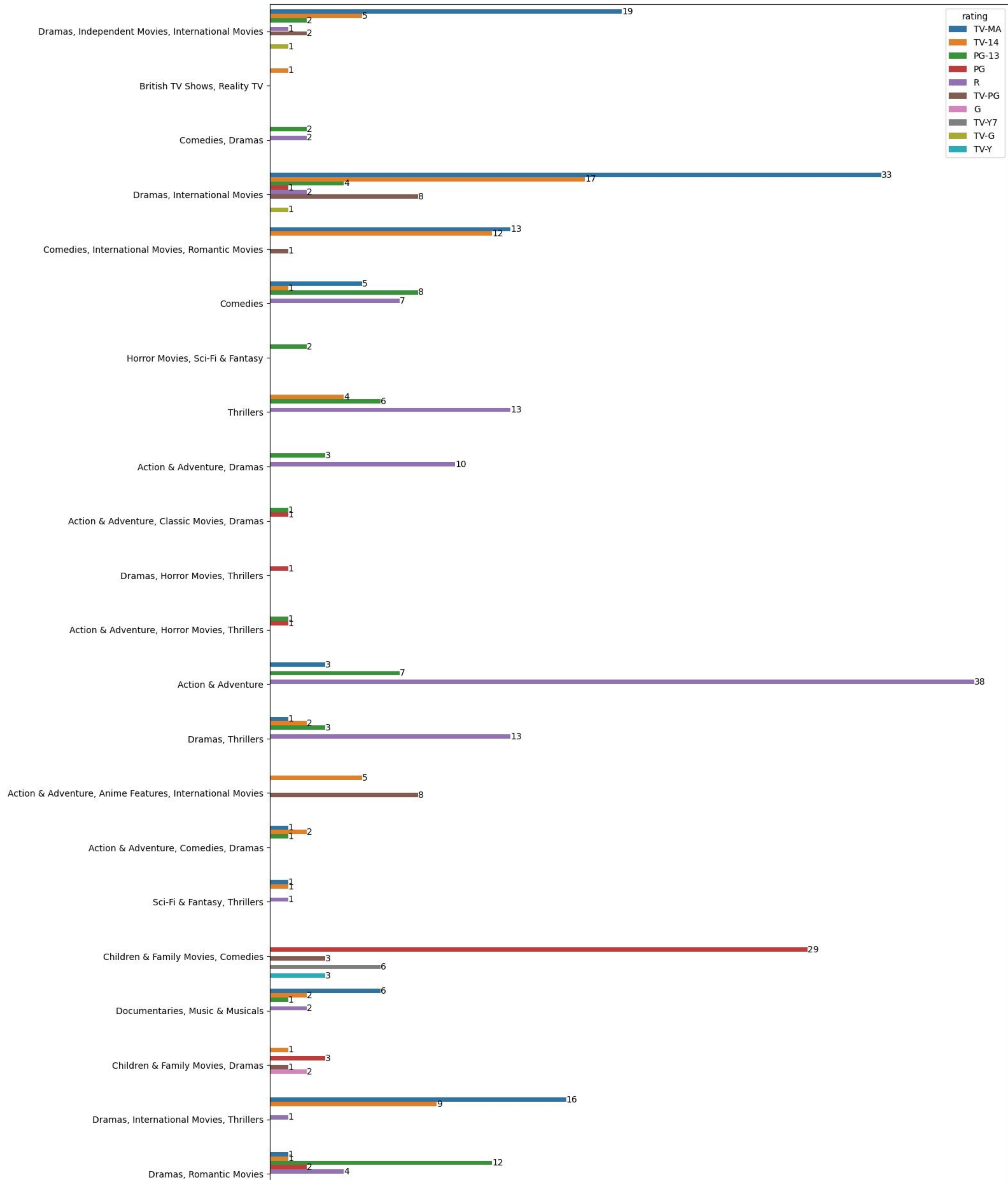
in this grph we can clearly see that most shows were stremed in USA which was 363 in no

```
In [84]:
plt.figure(figsize=(10,15))x1 = sns.countplot(x = 'type' , data = df , hue ='rating' )for bars in x1.containers:
    x1.bar_label(bars)plt.show()
```



by this graph it's confirmed that most of the watching are from movies where most rated movies are TV-MA which is 263

```
In [91]:
plt.figure(figsize=(15,200))x1 = sns.countplot(y = 'listed_in' , data = df , hue ='rating' )for bars in x1.containers:
    x1.bar_label(bars)plt.show()
```

most watched shows and movies are based on action and adventure which are R rated with watching of 38

Genre and Rating:

Most watched shows and movies are Action and Adventure genres. These titles are predominantly R-rated (38 instances). The highest-rated movies have the TV-MA rating (263 instances), indicating they are the most watched in terms of content rating.

Geographical Distribution:

The USA has the highest number of streams, with a total of 363 instances, making it the leading country for streaming.

Most Watched Rating:

TV-MA rated content is the most watched overall, with 276 instances.

Duration:

The most common duration for shows is 101 minutes, with 33 shows having this runtime.

Release Date:

The most releases occurred on July 1, 2021, with 48 titles launched on that day.

Invest More in Action and Adventure genres since they are the most watched. This could mean acquiring more licenses or producing original content in this genre. Target Popular Sub-genres: If data shows certain sub-genres (e.g., superhero or sci-fi action) are particularly popular, it would be wise to create more tailored content.

Expand TV-MA Content: Since TV-MA rated content (adult themes) is the most popular, further investment in mature, high-quality shows and movies could be beneficial. Increase Content Variety: Expand beyond typical genres (e.g., drama, thriller) to explore unique or niche areas within the TV-MA rating.

Localized Marketing: Since the USA has the highest viewing numbers, focusing on localized marketing and content specific to regional preferences could drive more subscriptions. Target New Markets: If the service is underperforming in certain countries, tailored content or promotions could be introduced to increase viewership.

Maximize Release Impact: July 1, 2021 was a peak release day, studying the content released on that date could reveal patterns. Was it a strategic marketing move? Consider repeating successful tactics like special promotions or exclusive premieres. Strategic Release Windows:

Experiment with release schedules to see if there are other key dates or times to maximize viewership and engagement.

Target High-Value Subscribers:

Use data to target high-value audiences (e.g., those who watch mature-rated content). Offer special subscription tiers or bundles that include premium TV-MA content. Improve Personalization:

Implement more advanced personalization features, suggesting shows based on viewing behavior (e.g., more Action, TV-MA-rated, or adventure genres). Retention Strategies:

Focus on keeping existing subscribers by continuously offering new content, improving the user experience, and addressing churn.

Tiered Pricing Models: Consider offering premium content at a higher price point for users who are more likely to engage with higher-rated content, such as TV-MA-rated shows. Subscription Bundles: Bundle related genres (e.g., Action + Adventure) or features (e.g., exclusive releases) into one package for higher-value pricing.

Collaborate with Creators: Work with popular directors, writers, or producers in action/adventure genres to create exclusive, highly anticipated content.

Partnerships: Look into collaborations with other platforms or industries (e.g., gaming, merchandising) to increase the brand’s presence and profitability.