import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt

df=pd.read\_csv('netflix1.csv')

df

	show_id	type	title	director	country	date_added	release_year	rating	duration	listed_in
0	s1	Movie	Dick Johnson Is Dead	Kirsten Johnson	United States	9/25/2021	2020	PG-13	90 min	Documentaries
1	s3	TV Show	Ganglands	Julien Leclercq	France	9/24/2021	2021	TV-MA	1 Season	Crime TV Shows, International TV Shows, TV Act
2	s6	TV Show	Midnight Mass	Mike Flanagan	United States	9/24/2021	2021	TV-MA	1 Season	TV Dramas, TV Horror, TV Mysteries
3	s14	Movie	Confessions of an Invisible Girl	Bruno Garotti	Brazil	9/22/2021	2021	TV-PG	91 min	Children & Family Movies, Comedies
4	s8	Movie	Sankofa	Haile Gerima	United States	9/24/2021	1993	TV-MA	125 min	Dramas, Independent Movies, Internationa Movies
										•••
8785	s8797	TV Show	Yunus Emre	Not Given	Turkey	1/17/2017	2016	TV-PG	2 Seasons	International TV Shows, TV Dramas
8786	s8798	TV Show	Zak Storm	Not Given	United States	9/13/2018	2016	TV-Y7	3 Seasons	Kids' TV
8787	s8801	TV Show	Zindagi Gulzar Hai	Not Given	Pakistan	12/15/2016	2012	TV-PG	1 Season	International TV Shows, Romantic TV Shows, TV
8788	s8784	TV Show	Yoko	Not Given	Pakistan	6/23/2018	2016	TV-Y	1 Season	Kids' TV
2720	c2726	TV	VOM	Not Given	Dakistan	<i>6/7/2</i> 019	2016	T\/ \/ 7	1 Sassan	Kida! T\

Next steps: (Generate code with df) (New interactive sheet)

df.groupby('country')['country'].count().sort\_values(ascending=False)

	country
country	
United States	3240
India	1057
United Kingdom	638
Pakistan	421
Not Given	287
Slovenia	1
Puerto Rico	1
Somalia	1
West Germany	1
Zimbabwe	1
86 rows × 1 columns	6

df['type'].value\_counts()

dtype: int64

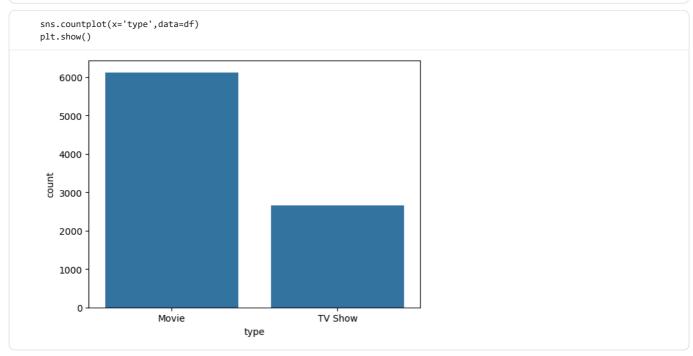
	show_id	type	title	director	country	date_added	release_year	rating	duration	listed_in
0	s1	Movie	Dick Johnson Is Dead	Kirsten Johnson	United States	9/25/2021	2020	PG-13	90 min	Documentaries
25	s17	Movie	Europe's Most Dangerous Man: Otto Skorzeny in	Pedro de Echave García, Pablo Azorín Williams	Not Given	9/22/2021	2020	TV-MA	67 min	Documentaries, International Movies
36	s35	TV Show	Tayo and Little Wizards	Not Given	Pakistan	9/17/2021	2020	TV-Y7	1 Season	Kids' TV
47	s190	TV Show	Bread Barbershop	Not Given	Pakistan	8/28/2021	2020	TV-Y	2 Seasons	Kids' TV, TV Comedies
58	s48	TV Show	The Smart Money Woman	Bunmi Ajakaiye	South Africa	9/16/2021	2020	TV-MA	1 Season	International TV Shows, Romantic TV Shows, TV
7484	s3288	TV Show	Maradona in Mexico	Not Given	Argentina	11/13/2019	2020	TV-MA	1 Season	Docuseries, Spanish-Language TV Shows
7517	s3370	TV Show	BoJack Horseman	Not Given	United States	10/25/2019	2020	TV-MA	6 Seasons	TV Comedies
7537	s3434	TV Show	The Hook Up Plan	Not Given	France	10/11/2019	2020	TV-MA	2 Seasons	International TV Shows, Romantic TV Shows, TV
8685	s8126	TV Show	Super Wings	Not Given	United States	12/1/2020	2020	TV-Y	3 Seasons	Kids' TV, Korean TV Shows

df.iloc[100:100]

show\_id type title director country date\_added release\_year rating duration listed\_in 
###

df.query('release\_year == 2020')

	show_id	type	title	director	country	date_added	release_year	rating	duration	listed_in	
0	s1	Movie	Dick Johnson Is Dead	Kirsten Johnson	United States	9/25/2021	2020	PG-13	90 min	Documentaries	11.
25	s17	Movie	Europe's Most Dangerous Man: Otto Skorzeny in	Pedro de Echave García, Pablo Azorín Williams	Not Given	9/22/2021	2020	TV-MA	67 min	Documentaries, International Movies	
36	s35	TV Show	Tayo and Little Wizards	Not Given	Pakistan	9/17/2021	2020	TV-Y7	1 Season	Kids' TV	
47	s190	TV Show	Bread Barbershop	Not Given	Pakistan	8/28/2021	2020	TV-Y	2 Seasons	Kids' TV, TV Comedies	
58	s48	TV Show	The Smart Money Woman	Bunmi Ajakaiye	South Africa	9/16/2021	2020	TV-MA	1 Season	International TV Shows, Romantic TV Shows, TV	
	•••		***								
7484	s3288	TV Show	Maradona in Mexico	Not Given	Argentina	11/13/2019	2020	TV-MA	1 Season	Docuseries, Spanish-Language TV Shows	
7517	s3370	TV Show	BoJack Horseman	Not Given	United States	10/25/2019	2020	TV-MA	6 Seasons	TV Comedies	
7537	s3434	TV Show	The Hook Up Plan	Not Given	France	10/11/2019	2020	TV-MA	2 Seasons	International TV Shows, Romantic TV Shows, TV	
8685	s8126	TV Show	Super Wings	Not Given	United States	12/1/2020	2020	TV-Y	3 Seasons	Kids' TV, Korean TV Shows	
8687	s8133	TV	Surviving R. Kelly Part II:	Not Given	United	4/13/2020	2020	TV-MA	1 Season	Crime TV Shows,	



top10 = df['country'].value\_counts().nlargest(10)
display(top10)

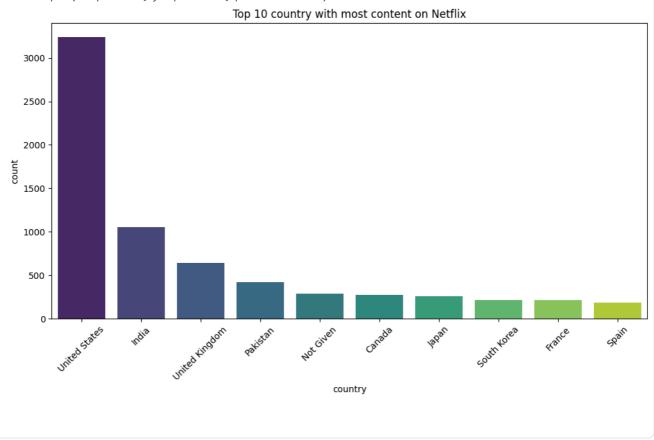
```
count
        country
  United States
                   3240
      India
                   1057
United Kingdom
                    638
    Pakistan
                    421
   Not Given
                    287
     Canada
                    271
     Japan
                    259
  South Korea
                    214
     France
                    213
     Spain
                    182
dtype: int64
```

```
plt.figure(figsize=(12,6))
sns.barplot(x=top10.index, y=top10.values, palette="viridis")

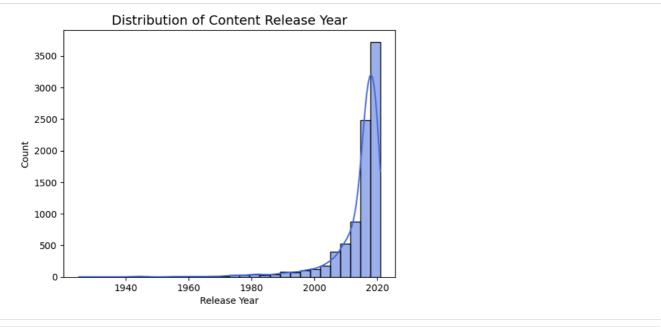
plt.xlabel('country')
plt.ylabel("count")
plt.title("Top 10 country with most content on Netflix")
plt.xticks(rotation=45)
plt.show()
```

/tmp/ipython-input-2361458008.py:2: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `x` variable to `hue` and se sns.barplot(x=top10.index, y=top10.values, palette="viridis")



```
sns.histplot(df["release_year"], bins=30, kde=True, color="royalblue")
plt.title("Distribution of Content Release Year", fontsize=14)
plt.xlabel("Release Year")
plt.ylabel("Count")
plt.show()
```



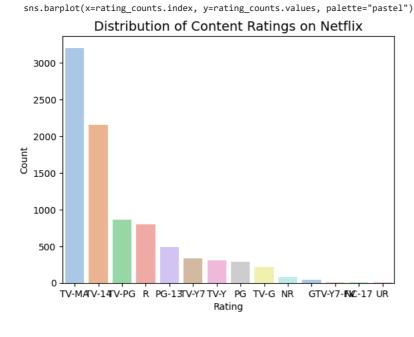
```
top_genres = df["listed_in"].value_counts().head(10)
sns.barplot(x=top_genres.values, y=top_genres.index, palette="magma")
plt.title("Top 10 Most Common genres on Netflix", fontsize=14)
plt.xlabel("Genres")
plt.show()
/tmp/ipython-input-1605797719.py:2: FutureWarning:
Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `y` variable to `hue` and se
 sns.barplot(x=top_genres.values, y=top_genres.index, palette="magma")
                                                           Top 10 Most Common genres on Netflix
                       Dramas, International Movies
                                    Documentaries
                                 Stand-Up Comedy
             Comedies, Dramas, International Movies
 .⊆ Dramas, Independent Movies, International Movies
 listed
                                           Kids' TV
                           Children & Family Movies
                 Children & Family Movies, Comedies
                Documentaries, International Movies
      Dramas, International Movies, Romantic Movies
                                                   0
                                                           50
                                                                   100
                                                                           150
                                                                                    200
                                                                                             250
                                                                                                     300
                                                                                                              350
```

```
rating_counts = df["rating"].value_counts()
sns.barplot(x=rating_counts.index, y=rating_counts.values, palette="pastel")
plt.title("Distribution of Content Ratings on Netflix", fontsize=14)
plt.xlabel("Rating")
plt.ylabel("Count")
plt.show()
```

Genres

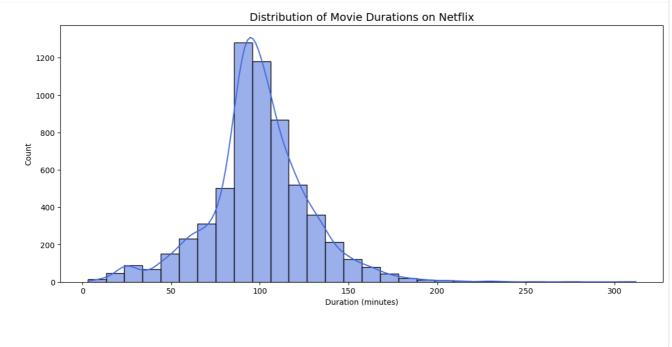
/tmp/ipython-input-2033981661.py:2: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `x` variable to `hue` and se



```
movies_df = df[df["type"] == "Movie"].copy()
movies_df["duration"] = movies_df["duration"].str.replace(" min", "").astype(float)

plt.figure(figsize=(14, 6))
sns.histplot(movies_df["duration"], bins=30, kde=True, color="royalblue")
plt.title("Distribution of Movie Durations on Netflix", fontsize=14)
plt.xlabel("Duration (minutes)")
plt.ylabel("Count")
plt.show()
```



```
plt.figure(figsize=(14, 6))
sns.boxplot(data=movies_df, x="rating", y="duration", palette="coolwarm")
plt.title("Distribution of Movie Durations Across Different Ratings", fontsize=14)
plt.xlabel("Rating")
plt.ylabel("Duration (minutes)")
plt.xticks(rotation=45)
plt.show()
```

/tmp/ipython-input-2404038288.py:2: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `x` variable to `hue` and se sns.boxplot(data=movies\_df, x="rating", y="duration", palette="coolwarm")

## Distribution of Movie Durations Across Different Ratings

