

```
In [8]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

```
In [10]: df = pd.read_csv('netflix1.csv')
```

```
In [12]: df.head()
```

	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, International Movies

```
In [14]: df.info()

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 8790 entries, 0 to 8789
Data columns (total 10 columns):
#   Column          Non-Null Count  Dtype  
---  -
0   show_id         8790 non-null   object 
1   type            8790 non-null   object 
2   title           8790 non-null   object 
3   director        8790 non-null   object 
4   country         8790 non-null   object 
5   date_added      8790 non-null   object 
6   release_year    8790 non-null   int64  
7   rating          8790 non-null   object 
8   duration        8790 non-null   object 
9   listed_in      8790 non-null   object 
dtypes: int64(1), object(9)
memory usage: 686.8+ KB
```

```
In [16]: df['listed_in'].head()
```

```
Out[16]: 0      Documentaries
1  Crime TV Shows, International TV Shows, TV Act...
2      TV Dramas, TV Horror, TV Mysteries
3  Children & Family Movies, Comedies
4  Dramas, Independent Movies, International Movies
Name: listed_in, dtype: object
```

```
In [18]: df['type'].head()
```

```
Out[18]: 0      Movie
1      TV Show
2      TV Show
3      Movie
4      Movie
Name: type, dtype: object
```

```
In [20]: df['listed_in']
```

```
Out[20]: 0      Documentaries
1  Crime TV Shows, International TV Shows, TV Act...
2      TV Dramas, TV Horror, TV Mysteries
3  Children & Family Movies, Comedies
4  Dramas, Independent Movies, International Movies
...
8785  International TV Shows, TV Dramas
8786  Kids' TV
8787  International TV Shows, Romantic TV Shows, TV ...
8788  Kids' TV
8789  Kids' TV
Name: listed_in, Length: 8790, dtype: object
```

```
In [22]: df.duplicated().sum()
```

```
Out[22]: 0
```

```
In [24]: df.duplicated()
```

```
Out[24]: 0      False
1      False
2      False
3      False
4      False
...
8785  False
8786  False
8787  False
8788  False
8789  False
Length: 8790, dtype: bool
```

```
In [26]: df.describe()
```

	release_year
count	8790.000000
mean	2014.183163
std	8.825466
min	1925.000000
25%	2013.000000
50%	2017.000000
75%	2019.000000
max	2021.000000

#### Data Cleaning

```
In [12]: print(df.isnull().sum())
```

```
show_id      0
type         0
title        0
director     0
country      0
date_added   0
release_year  0
rating       0
duration     0
listed_in    0
dtype: int64
```

```
In [22]: print(df.drop_duplicates(inplace=True))
```

```
None
```

```
In [24]: print(df.dtypes)
```

```
show_id      object
type         object
title        object
director     object
country      object
date_added   object
release_year  int64
rating       object
duration     object
listed_in    object
dtype: object
```

```
In [34]: df['date_added']=pd.to_datetime(df['date_added'])
```

```
In [36]: print(df.dtypes)
```

```
show_id      object
type         object
title        object
director     object
country      object
date_added   datetime64[ns]
release_year  int64
rating       object
duration     object
listed_in    object
dtype: object
```

#### Exploratory Data Analysis

```
In [ ]: # Count the number of movies and TV shows
```

```
In [40]: print(df['type'].value_counts())
```

```
type
Movie      6126
TV Show    2664
Name: count, dtype: int64
```