

Netflix Movies and TV Shows Data Analysis Using

OBJECTIVES:

- Analyze the distribution of content types (movie vs shows).
- Identify the most common ratings for movies and TV shows.
- List and analyze content based on release years, countries, and durations.
- Explore and categorize content based on specific criteria and keywords.

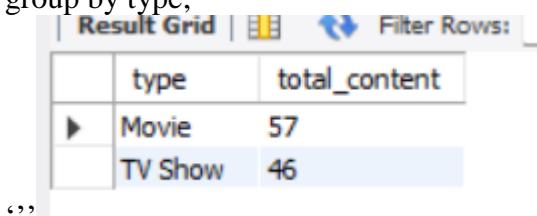
SCHEMA:

```
CREATE TABLE netflix (
    show_id VARCHAR(6),
    `type` VARCHAR(10),
    title VARCHAR(250),
    director VARCHAR(550),
    casts VARCHAR(1050),
    country VARCHAR(550),
    date_added VARCHAR(55),
    release_year INT,
    rating VARCHAR(15),
    duration VARCHAR(15),
    listed_in VARCHAR(250),
    description VARCHAR(550)
);
```

Business problem and solutions:

1. Count the Number of Movies and vs TV shows

```
'''SQL
Select
    Type,
    Count (*) as total_content
from netflix_movie
group by type;
```



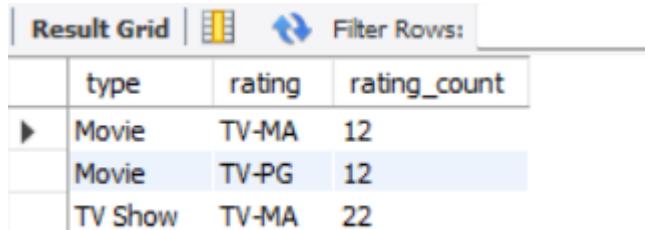
type	total_content
Movie	57
TV Show	46

****OBJECTIVE:**** Determine the distribution of content types on Netflix

2.Find the Most Common Rating for Movies and TV Shows

'''SQL

```
SELECT type, rating, rating_count
FROM (
    SELECT
        type,
        rating,
        COUNT(*) AS rating_count,
        RANK() OVER (PARTITION BY type ORDER BY COUNT(*) DESC) AS rnk
    FROM Netflix_movie
    GROUP BY type, rating
) AS sub
WHERE rnk = 1; ''
```



The screenshot shows a database result grid with three columns: type, rating, and rating_count. There are four rows of data:

	type	rating	rating_count
▶	Movie	TV-MA	12
	Movie	TV-PG	12
	TV Show	TV-MA	22

**** OBJECTIVE:**** Identify the most frequently occurring rating for each type of content.

3.List All Movies Released in a Specific Year (e.g., 2021)

'''sql

```
SELECT *
FROM Netflix_movie
Where release_year = 2021;
'''
```

casts	country	date_added	release_year	rating	duration	listed_in
Vanessa Hudgens, Kimiko Glenn, James Marsden...	United States	24-Sep-21	2021	PG	91 min	Children
Melissa McCarthy, Chris O'Dowd, Kevin Kline, Ti...	United States	24-Sep-21	2021	PG-13	104 min	Comedie
Luna Wedler, Jannis Niewöhner, Milan Peschel...	Germany, Czech Republic	23-Sep-21	2021	TV-MA	127 min	Dramas,
Klara Castanho, Lucca Picon, Júlia Gomes, Mar...	Brazil	22-Sep-21	2021	TV-PG	91 min	Children
Freida Pinto, Logan Marshall-Green, Robert Joh...	United States	22-Sep-21	2021	TV-14	94 min	Thrillers
Maisie Benson, Paul Killam, Kerry Godjohansen, A...	United States	21-Sep-21	2021	TV-Y	61 min	Children
t ... Abhishek Banerjee, Rinku Rajguru, Delzad Hiwal...	India	17-Sep-21	2021	TV-14	111 min	Dramas,
Adrian Titieni, Elena Purea, Judith State, Valeriu...	Romania	17-Sep-21	2021	TV-MA	110 min	Dramas,
Gilles Lellouche, Karim Leklou, Françoise Civil, A...	France	17-Sep-21	2021	TV-MA	105 min	Action &
Winslow Fegley, Lydia Jewett, Krysten Ritter	United States	16-Sep-21	2021	PG	23 min	Documentary
... Michael Schumacher	United States	15-Sep-21	2021	TV-PG	103 min	Children
Evan Spiridellis, Erin Fitzgerald, Jeff Gill, Fred T...	United States	14-Sep-21	2021	TV-Y	13 min	Children
Rajar Chitrakar, Iraann Dharak Dhamnab	United States	14-Sep-21	2021	TV-14	106 min	Children

****OBJECTIVE**** Retrieve all movies released in a specific year.

4. Find the Top 5 countries with the Most Content Netflix

'''sql

```

SELECT new_country, COUNT(show_id) AS total_content
FROM (
SELECT
SUBSTRING_INDEX(SUBSTRING_INDEX(country, ',', n.digit), ',', -1) AS new_country,
show_id
FROM netflix_movie
JOIN (
SELECT 1 AS digit UNION ALL SELECT 2 UNION ALL SELECT 3 UNION ALL
SELECT 4 UNION ALL SELECT 5 UNION ALL SELECT 6 UNION ALL
SELECT 7 UNION ALL SELECT 8 UNION ALL SELECT 9 UNION ALL SELECT 10
) AS n
ON CHAR_LENGTH(country) - CHAR_LENGTH(REPLACE(country, ',', '')) >= n.digit - 1
) AS split_countries
GROUP BY new_country
ORDER BY total_content DESC
LIMIT 5;

```

new_country	total_content
	43
United States	21
Japan	13
India	6
United Kingdom	6

How it works:

- Splits the country column (which has multiple countries in one row).
- Counts the number of shows for each country.
- Sorts and selects the **top 5** countries with the most content.

Key SQL Functions Used:

- SUBSTRING INDEX() → Splits country names.
- COUNT() → Counts the number of shows.
- ORDER BY → Sorts by total content

****OBJECTIVE****: Identify the top 5 countries with the highest number of content items

5. Identify the Longest Movie

```
'''sql
```

```
SELECT *
```

```
FROM netflix_movie
```

```
WHERE type = 'Movie'
```

```
AND duration = (SELECT MAX(duration) FROM netflix_movie WHERE type = 'Movie');
```

```
'''
```

director	casts	country	date_added	release_year	rating	duration	listed_in
Toshiya Shinohara	Kappei Yamaguchi, Satsuki Yukino, Mieko Harad...	Japan	15-Sep-21	2002	TV-14	99 min	Action & Adventure, Anime Features, In
Toshiya Shinohara	Kappei Yamaguchi, Satsuki Yukino, Koji Tsujitani...	Japan	15-Sep-21	2003	TV-14	99 min	Action & Adventure, Anime Features, In

****OBJECTIVE:**** Find the movie with the longest duration

6. Find All Movie/TV shows by Director ‘ Daniel Espinosa’

```
'''sql
```

```
select * from Netflix_movie  
where director ='Daniel Espinosa'
```

show_id	type	title	director	casts	country	date_added	release_year
s47	Movie	Safe House	Daniel Espinosa	Denzel Washington, Ryan Reynolds, Vera Farmiga, ..., ...	South Africa, United States, Japan	16-Sep-21	2012

****OBJECTIVE:**** List all content directed by ‘Daniel Espinosa’

7. List all TV shows with More than 5 Seasons

```
'''sql  
SELECT *,  
       CAST(SUBSTRING_INDEX(duration, ' ', 1) AS UNSIGNED) AS  
       seasons  
FROM Netflix_movie  
WHERE type = 'TV Show'  
AND CAST(SUBSTRING_INDEX(duration, ' ', 1) AS UNSIGNED) > 5;  
'''
```

show_id	type	title	director	casts	country	date_added	release_year
s9	TV Show	The Great British Baking Show	Andy Devonshire	Mel Giedroyc, Sue Perkins, Mary Berry, Paul Hollywood, ..., ...	United Kingdom	24-Sep-21	2021
s56	TV Show	Nailed It	Jacques Torres	Nicole Byer, Jacques Torres	United States	15-Sep-21	2021
s66	TV Show	Numberblocks	Beth Chalmers, David Holt, Marcel McCalla, Terri Dwyer	Beth Chalmers, David Holt, Marcel McCalla, Terri Dwyer	United Kingdom	15-Sep-21	2021
s68	TV Show	Saved by the Bell	Mark-Paul Gosselaar, Tiffani Thiessen, Mario Lopez, ..., ...	Mark-Paul Gosselaar, Tiffani Thiessen, Mario Lopez, ..., ...	United States	15-Sep-21	1994
s83	TV Show	Lucifer	Tom Ellis, Lauren German, Kevin Alejandro, D.B. ..., ...	Tom Ellis, Lauren German, Kevin Alejandro, D.B. ..., ...	United States	10-Sep-21	2021

****OBJECTIVE:**** Identify TV shows with more than 5 seasons

Explanation:

1. SUBSTRING_INDEX(duration, ' ', 1) → Extracts the numeric part of duration before the first space (e.g., "6 Seasons" → "6").

2. CAST(AS UNSIGNED) → Converts the extracted string into an integer.

3.WHERE type = 'TV Show' → Filters only TV shows.

4.AND CAST(...) > 5 → Filters only those with more than 5 seasons.

8.Find the top 5 years with the highest percentage of total Netflix releases in India?"

```
'''sql
SELECT
    country,
    release_year,
    COUNT(show_id) AS total_release,
    ROUND(
        COUNT(show_id) / NULLIF(
            (SELECT COUNT(show_id) FROM netflix_movie WHERE country = 'India'), 0
        ) * 100, 2
    ) AS avg_release
FROM netflix_movie
WHERE country = 'India'
GROUP BY country, release_year
ORDER BY avg_release DESC
LIMIT 5;
```

Result Grid | Filter Rows: Export:

	country	release_year	total_release	avg_release
▶	India	2021	2	33.33
	India	2014	2	33.33
	India	1998	1	16.67
	India	2015	1	16.67

1. Counts the number of shows/movies released each year in India.
2. Calculates the percentage of total Indian Netflix releases for each year.
3. Ranks and displays the top 5 years with the highest share of Netflix content.

Key SQL Skills Used:

Aggregation (`COUNT()`) to count releases.

Subquery to get the total Netflix releases in India.

Percentage Calculation with `ROUND()`.

Sorting (`ORDER BY`) to find top years.

****OBJECTIVE:**** This query analyzes Netflix content and finds the **top 5 years** with the highest percentage of releases in **India**.

9. List All Movies that are Documentaries

```
'''sql
select *
from netflix_movie
where listed_in like'%Documentaries%';
'''
```

country	date_added	release_year	rating	duration	listed_in
United States	25-Sep-21	2020	PG-13	90 min	Documentaries
	22-Sep-21	2020	TV-MA	67 min	Documentaries, International Movies
	16-Sep-21	2021	PG	23 min	Documentaries
	15-Sep-21	2021	TV-14	113 min	Documentaries, International Movies, Sports M...
	9-Sep-21	2021	PG-13	96 min	Documentaries, Sports Movies
France	9-Sep-21	2021	TV-14	92 min	Documentaries, International Movies
United States	7-Sep-21	2018	TV-MA	97 min	Documentaries, Music & Musicals
United States	7-Sep-21	2021	TV-MA	80 min	Documentaries, Sports Movies

****OBJECTIVE:**** Retrieve all movies classified as documentaries.

10.Find How Many Movies Actor ‘%Ama Qamata, Khosi Ngema, Gail Mabalane, Thabang Molaba, Dillon Windvogel, Natasha Thahane, Arno Greeff, Xolile Tshabalala, Getmore Sithole, Cindy Mahlangu, Ryle De Morny, Greteli Fincham, Sello Maake Ka-Ncube, Odwa Gwanya, Mekaila Mathys, Sandi Schultz, Duane Williams, Shamilla Miller, Patrick Mofokeng’ Appeared in the last 10 years

”sql

```
SELECT* FROM netflix_movie
where casts
like '%Ama Qamata, Khosi Ngema, Gail Mabalane, Thabang Molaba, Dillon
Windvogel, Natasha Thahane, Arno Greeff, Xolile Tshabalala, Getmore
Sithole, Cindy Mahlangu, Ryle De Morny, Greteli Fincham, Sello Maake
Ka-Ncube, Odwa Gwanya, Mekaila Mathys, Sandi Schultz, Duane Williams,
Shamilla Miller, Patrick Mofokeng%' And release_year >
extract(year from current_date)-10
”
```

show_id	type	title	director	casts	country	date_added	release_year	rating
s2	TV Show	Blood & Water		Ama Qamata, Khosi Ngema, Gail Mabalane, Tha...	South Africa	24-Sep-21	2021	TV-MA

****OBJECTIVE**** count the number of movie featuring %Ama Qamata, Khosi Ngema, Gail Mabalane, Thabang Molaba, Dillon Windvogel, Natasha Thahane, Arno Greeff, Xolile Tshabalala, Getmore Sithole, Cindy Mahlangu, Ryle De Morny, Greteli Fincham, Sello Maake Ka-Ncube, Odwa Gwanya, Mekaila Mathys, Sandi Schultz, Duane Williams, Shamilla Miller, Patrick Mofokeng% in the last 10 years