Netflix Data Analysis

1. For each director, count the number of movies and TV shows created by them in separate columns
   for directors who have created both TV shows and movies:

```sql
SELECT nd.director,
       COUNT(DISTINCT CASE WHEN n.type = 'Movie' THEN n.show_id END) AS Num_of_Movie,
       COUNT(DISTINCT CASE WHEN n.type = 'TV Show' THEN n.show_id END) AS Num_of_tvshow
FROM netflix_new n
INNER JOIN netflix_directors nd ON n.show_id = nd.show_id
GROUP BY nd.director
HAVING COUNT(DISTINCT n.type) > 1;
```

2. Which country has the highest number of comedy movies:

```sql
SELECT nc.country, COUNT(DISTINCT ng.show_id) AS Num_of_movies
FROM netflix_genres ng
INNER JOIN netflix_countries nc ON ng.show_id = nc.show_id
INNER JOIN netflix_new nn ON ng.show_id = nn.show_id
WHERE genre = 'Comedies' AND nn.type = 'Movie'
GROUP BY nc.country
ORDER BY Num_of_movies DESC
LIMIT 1;
```

3. For each year (as per date added to Netflix), which director has the maximum number of movies released:

```sql
WITH cte AS (
        SELECT nd.director, COUNT(nn.show_id) AS Num_of_Movies, EXTRACT(YEAR FROM nn.date_added) AS date
    FROM netflix_new nn
    INNER JOIN netflix_directors nd ON nn.show_id = nd.show_id
    WHERE nn.type = 'Movie'
    GROUP BY nd.director, nn.date_added
),
cte2 AS (
    SELECT *, ROW_NUMBER() OVER(PARTITION BY date ORDER BY Num_of_Movies DESC, director) AS rn
    FROM cte
)
SELECT * FROM cte2 WHERE rn = 1;
```

4. What is the average duration of movies in each genre:

```sql
SELECT ng.genre, AVG(CAST(REPLACE(duration, ' min', '') AS INT)) AS avg_duration_int
FROM netflix_new nn
INNER JOIN netflix_genres ng ON nn.show_id = ng.show_id
WHERE nn.type = 'Movie'
GROUP BY ng.genre;
```

5. Find the list of directors who have created both horror and comedy movies. Display director name along with the number of comedy and horror movies directed by them:

```
SELECT nd.director,
            COUNT(DISTINCT CASE WHEN ng.genre = 'Comedies' THEN nd.show_id END) AS
Num_of_Comedy,
         COUNT(DISTINCT CASE WHEN ng.genre = 'Horror Movies' THEN nd.show_id END) AS
Num_of_Horror
FROM netflix_new nn
INNER JOIN netflix_genres ng ON nn.show_id = ng.show_id
INNER JOIN netflix_directors nd ON nn.show_id = nd.show_id
WHERE nn.type = 'Movie' AND ng.genre IN ('Comedies', 'Horror Movies')
GROUP BY nd.director
HAVING COUNT(DISTINCT ng.genre) = 2;
```

6. Which actors have acted in both 'Action' and 'Comedy' movies:

```
SELECT cast_member
FROM netflix_cast nc
JOIN netflix_genres ng ON nc.show_id = ng.show_id
WHERE TRIM(ng.genre) IN ('Action', 'Comedies')
GROUP BY cast_member
HAVING COUNT(DISTINCT TRIM(ng.genre)) = 2;
```