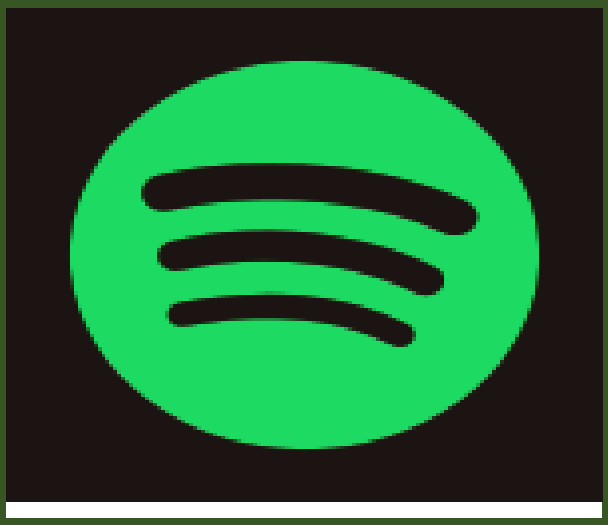
Spotify Songs Album Analysis



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Utilized MySQL for comprehensive Spotify song album analysis. Extracted and processed data to unveil trends in genres, artists, and popularity metrics. Delivered insights crucial for understanding user preferences and informing strategic decisions. Optimized queries for efficient data retrieval and analysis, enhancing project efficacy and depth.

Important Codes:

```
RENAME TABLE popular_spotify_songs  TO T1;


select* from T1;


-- 1. Display all columns from the songs table
select * from T1;


-- 2. Count the total number of songs
SELECT COUNT(*) AS total_songs FROM T1;
```

```sql
--3. Find the average duration of songs
SELECT AVG(duration_ms) AS avg_duration FROM T1;

--4.  Total number of artists
SELECT COUNT(DISTINCT `artist(s)_name`) AS total_artists FROM T1;

--5.  Total number of tracks per artist
SELECT `artist(s)_name`, COUNT(*) AS total_tracks
FROM T1
GROUP BY `artist(s)_name`;

--6. Average number of streams per track
SELECT AVG(streams) AS avg_streams FROM T1;

--7. Total streams per artist
SELECT `artist(s)_name`, SUM(streams) AS total_streams
FROM T1
GROUP BY `artist(s)_name`;

--8. Tracks released by year
SELECT released_year, COUNT(*) AS total_tracks
FROM T1
GROUP BY released_year
ORDER BY released_year;

--9. Top 10 tracks with the highest streams
SELECT track_name, `artist(s)_name`, streams
FROM T1
ORDER BY streams DESC
```

```
LIMIT 10;

--10. Tracks in Spotify playlists
SELECT COUNT(*) AS in_spotify_playlists
FROM T1
WHERE in_spotify_playlists = 1;

--11. Tracks in Apple playlists
SELECT COUNT(*) AS in_apple_playlists
FROM T1
WHERE in_apple_playlists = 1;

--12. Tracks in Spotify charts
SELECT COUNT(*) AS in_spotify_charts
FROM T1
WHERE in_spotify_charts = 1;

--13. Tracks by month
SELECT released_month, COUNT(*) AS total_tracks
FROM T1
GROUP BY released_month
ORDER BY released_month;

--14.  Average artist count per track
SELECT AVG(artist_count) AS avg_artist_count FROM T1;

--15.  Total streams per year
SELECT released_year, SUM(streams) AS total_streams
FROM T1
```

```
GROUP BY released_year
ORDER BY released_year;

--16. Average streams per year
SELECT released_year, AVG(streams) AS avg_streams
FROM T1
GROUP BY released_year
ORDER BY released_year;

--17.  Average streams per month
SELECT released_month, AVG(streams) AS avg_streams
FROM T1
GROUP BY released_month
ORDER BY released_month;

--18. Distribution of tracks in Spotify playlists by year
SELECT released_year, COUNT(*) AS in_spotify_playlists
FROM T1
WHERE in_spotify_playlists = 1
GROUP BY released_year
ORDER BY released_year;

--19.  Distribution of tracks in Apple playlists by year
SELECT released_year, COUNT(*) AS in_apple_playlists
FROM T1
WHERE in_apple_playlists = 1
GROUP BY released_year
ORDER BY released_year;
```

```sql
--20.  Top 10 artists by total streams
SELECT `artist(s)_name`, SUM(streams) AS total_streams
FROM T1
GROUP BY `artist(s)_name`
ORDER BY total_streams DESC
LIMIT 10;

--21. Tracks in both Spotify and Apple playlists
SELECT COUNT(*) AS in_both_playlists
FROM T1
WHERE in_spotify_playlists = 1 AND in_apple_playlists = 1;

--22. Tracks with multiple artists
SELECT track_name, `artist(s)_name`, artist_count
FROM T1
WHERE artist_count > 1;

SELECT released_year,
       AVG(track_count) AS avg_tracks_per_artist
FROM (
    SELECT released_year, `artist(s)_name`, COUNT(*) AS track_count
    FROM T1
    GROUP BY released_year, `artist(s)_name`
) AS subquery
GROUP BY released_year;
```