

## Spotify Charts Database

I picked the Spotify charts database because it's packed with info on many of my favorite artists and it's cool to see who's on top each year. But when I tried to bring it into MongoDB, I got this "utf-8" error. It basically means there's some stuff in the file that MongoDB doesn't understand, so I chose another similar database that represented the same data.

### Query 1:

This query fetches the five songs with the most streams. Knowing these songs gives insight into the current popular tastes and trends in music (at the time the database was created). The top streamed songs were, Ed Sheeran Shape of You, Drake God's plan. I ran into an issue where the top two songs would repeat to five. I'm not sure why this is the case it may be because of duplicate entries.

### Query 2:

By counting songs from a specific artist, like Ed Sheeran, we can see their popularity and how much presence they have in the top charts. The number of songs by Ed Sheeran are 6794. This is a huge number, and may also be inflated because of duplicate entries.

### Query 3:

This query helps understand the most popular music for a specific month. January's releases can indicate what started the year strong. At first it was giving me the same 3 songs 10 times so I created a loop that looks for duplicate songs and removed them from the array until it found 10 unique songs. They were, shape of you, Castle on the hill, starboy, Closer, Rockabye, I don't wanna live forever, Le me love you, Don't wanna know, say you won't let go and Fake love,

### Query 4:

By identifying distinct artists in the top songs, we can find out which artists dominate the charts and have multiple hit songs. The following top artists were as follows 'Ed Sheeran', 'ZAYN, Taylor Swift', 'Post Malone', 'Post Malone, 21 Savage', 'Dua Lipa', 'Camila Cabello', 'The Weeknd, Daft Punk', 'The Weeknd', 'DaBaby', 'Luis Fonsi', 'THE SCOTTS, Travis Scott, Kid Cudi', 'Lady Gaga', 'Drake', 'Kendrick Lamar', 'The Chainsmokers', 'Powfu, beabadoobee', 'SAINT JHN'. It's important to note that this is based off singles in the top charts. So if there is a song in top 10 with two artists eg. ZAYN and Taylor Swift. The query will recognize this as one artist. Which is why some artists are duplicated.

### Query 5:

Calculating the average streams of the top 10 songs gives an idea of how popular the top hits are compared to other songs. By adding up all the streams of the top 10 songs then averaging it you get 7605978.3. This is a lot of time.

10/18/2023 ☐ Search

Most Popular Songs for 2023-10-18

Shape of You by Ed Sheeran

Castle on the Hill by Ed Sheeran

Starboy by The Weeknd, Daft Punk

Closer by The Chainsmokers, Halsey

Rockabye (feat. Sean Paul & Anne-Marie) by Clean Bandit

I Don't Wanna Live Forever (Fifty Shades Darker) - From "Fifty Shades Darker (Original Motion Picture Soundtrack)" by ZAYN, Taylor Swift

Let Me Love You by DJ Snake, Justin Bieber

Don't Wanna Know by Maroon 5, Kendrick Lamar

Say You Won't Let Go by James Arthur

The user is able to pick a month, date, and year. The server will find the most popular songs from the month of this year and visualize it. The visualization is based of number of streams so the bigger and brighter texts have the most streams for that certain month.

10/18/2023 ☐

Search

## Most Popular Songs for 2023-10-18

No songs found

If there are no songs found for that month it output “no songs found”

The query takes in the search criteria from the user and used .find to find the relevant list of songs from that date.

10/11/2023 ☐ Search

Most Popular Songs for 2023-10-11

Shape of You by Ed Sheeran

Castle on the Hill by Ed Sheeran

Starboy by The Weeknd, Daft Punk

Closer by The Chainsmokers, Halsey

Rockabye (feat. Sean Paul & Anne-Marie) by Clean Bandit

I Don't Wanna Live Forever (Fifty Shades Darker) - From "Fifty Shades Darker (Original Motion Picture Soundtrack)" by ZAYN, Taylor Swift

Let Me Love You by DJ Snake, Justin Bieber

Don't Wanna Know by Maroon 5, Kendrick Lamar

Say You Won't Let Go by James Arthur