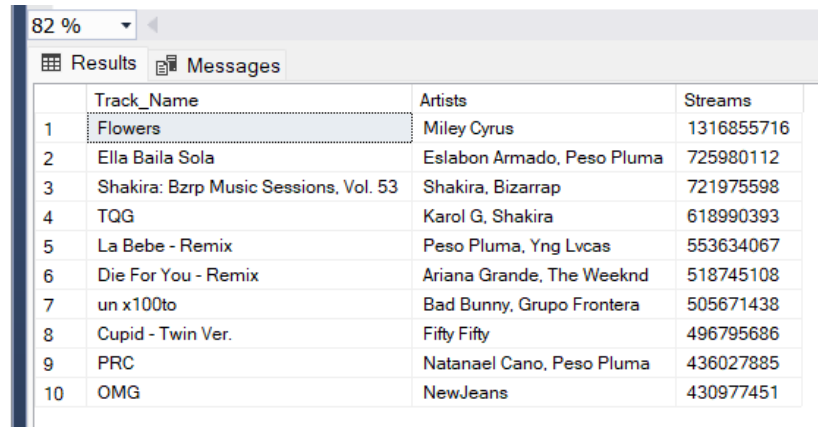


SPOTSTREAM_ANALYSIS

INTRO :- Welcome to the "Most Streamed Songs of 2023 Data Analysis" project! This project delves into the world of music data to uncover insights into the most streamed songs of 2023. Leveraging the power of SQL queries in Microsoft SQL Server, we explore various aspects such as song popularity, artist performance, and trends within the dataset.

1. Retrieve Top 10 for songs released in 2023.

```
SELECT top 10 track_name AS Track_Name, artist_s_name as Artists, streams As Streams
FROM song_data
WHERE released_year = 2023
ORDER BY streams DESC;
```



The screenshot shows a SQL Server query results window with a zoom level of 82%. The 'Results' tab is active, displaying a table with 4 columns: an index, Track_Name, Artists, and Streams. The table lists the top 10 songs by streams for the year 2023.

	Track_Name	Artists	Streams
1	Flowers	Miley Cyrus	1316855716
2	Ella Baila Sola	Eslabon Armado, Peso Pluma	725980112
3	Shakira: Bzrp Music Sessions, Vol. 53	Shakira, Bizarrap	721975598
4	TQG	Karol G, Shakira	618990393
5	La Bebe - Remix	Peso Pluma, Yng Lvcas	553634067
6	Die For You - Remix	Ariana Grande, The Weeknd	518745108
7	un x100to	Bad Bunny, Grupo Frontera	505671438
8	Cupid - Twin Ver.	Fifty Fifty	496795686
9	PRC	Natanael Cano, Peso Pluma	436027885
10	OMG	NewJeans	430977451

2. Find the top 5 most recent songs based on their release dates

```
SELECT Top 5 track_name AS Track_Name, artist_s_name As Artists, streams As Streams,
CONCAT(
    FORMAT(released_day, '00'),
    '-',
    FORMAT(released_month, '00'),
    '-',
    FORMAT(released_year, '0000')
) AS Released_Date
FROM song_data
ORDER BY released_year DESC, released_month DESC, released_day DESC, streams desc;
```

32 %

Results

Messages

	Track_Name	Artists	Streams	Released_Date
1	Seven (feat. Latto) (Explicit Ver.)	Latto, Jung Kook	141381703	14-07-2023
2	S91	Karol G	16011326	14-07-2023
3	Overdrive	Post Malone	14780425	14-07-2023
4	What Was I Made For? [From The Motion Picture "B...	Billie Eilish	30546883	13-07-2023
5	Rush	Troye Sivan	22581161	13-07-2023

3. Find the Song with the highest number of streams.

Select top 1 track_name AS Track_name, artist_s_name AS Artists, streams, released_year from song_data order by streams desc;

82 %

Results

Messages

	Track_name	Artists	streams	released_year
1	Blinding Lights	The Weeknd	3703895074	2019

4. Find the artist with the least number of streams on their music.

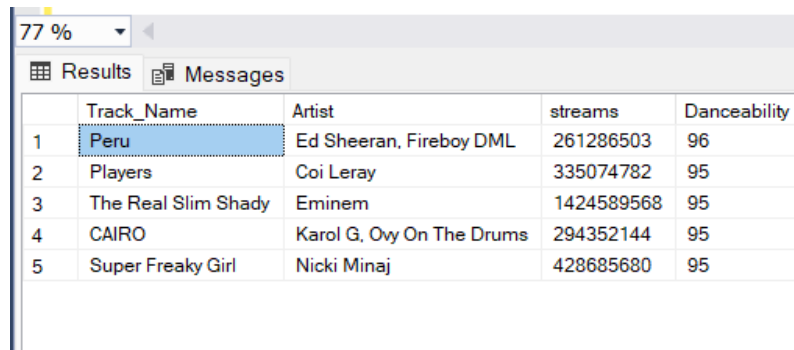
SELECT TOP 3
 artist_s_name AS Artist,
 SUM(streams) AS TotalStreams
 FROM
 Song_data
 GROUP BY
 artist_s_name
 ORDER BY
 TotalStreams asc;

93 %

Results			Messages	
	Artist		TotalStreams	
1	Edison Lighthouse		0	
2	Carin Leon, Grupo Frontera		2762	
3	Arijit Singh, Vishal Dadlani, Sukriti Kakar, Vish...		1365184	

5. Find songs as per high danceability percentage.

```
SELECT top 5
  track_name AS Track_Name,
  artist_s_name AS Artist,
  streams,
  danceability AS Danceability
FROM
  song_data
ORDER BY
  danceability DESC;
```

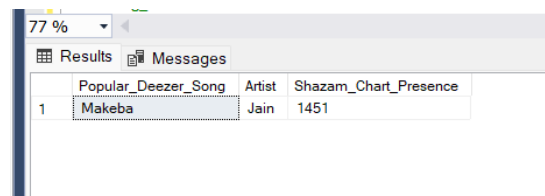


The screenshot shows a database interface with a search bar at the top set to '77 %'. Below the search bar are two tabs: 'Results' and 'Messages'. The 'Results' tab is active, displaying a table with 5 rows and 5 columns. The columns are 'Track_Name', 'Artist', 'streams', and 'Danceability'. The first row is highlighted with a blue selection box.

	Track_Name	Artist	streams	Danceability
1	Peru	Ed Sheeran, Fireboy DML	261286503	96
2	Players	Coi Leray	335074782	95
3	The Real Slim Shady	Eminem	1424589568	95
4	CAIRO	Karol G, Ovy On The Drums	294352144	95
5	Super Freaky Girl	Nicki Minaj	428685680	95

6. Find the song popular in Shazam Chart

```
SELECT TOP 1
  track_name AS Popular_Deezer_Song,
  artist_s_name AS Artist,
  in_shazam_charts AS Shazam_Chart_Presence
FROM
  song_data
ORDER BY
  in_Shazam_charts DESC;
```



The screenshot shows a database interface with a search bar at the top set to '77 %'. Below the search bar are two tabs: 'Results' and 'Messages'. The 'Results' tab is active, displaying a table with 1 row and 4 columns. The columns are 'Popular_Deezer_Song', 'Artist', and 'Shazam_Chart_Presence'. The first row is highlighted with a blue selection box.

	Popular_Deezer_Song	Artist	Shazam_Chart_Presence
1	Makeba	Jain	1451

7. Find Artists whose songs have both danceability and energy percentages greater than 90.

```
Select artist_s_name AS Artist,
track_name as Track_name,
AVG(streams) AS Average_of_Streams,
danceability as Danceability_percentage,
```

```
energy AS energy_percentage
from Song_data
where danceability > 90 and energy > 90
group by artist_s_name, track_name, danceability, energy;
```

77 %

Results

Messages

	Artist	Track_name	Average_of_Streams	Danceability_percentage	energy_percentage
1	PSY, Suga	That That (prod. & feat. SUGA of BTS)	212109195	91	96

8. Identify Songs with the Same Title but Different Artists.

```
SELECT DISTINCT
  LEAST(s1.artist_s_name, s2.artist_s_name) AS Artists_1,
  GREATEST(s1.artist_s_name, s2.artist_s_name) AS Artist_2,
  s1.track_name AS Track_name
FROM
  Song_data s1
JOIN
  Song_data s2 ON s1.track_name = s2.track_name
WHERE
  s1.artist_s_name <> s2.artist_s_name;
```

93 %

Results		Messages	
	Artists_1	Artist_2	Track_name
1	David Kushner	Harry Styles	Daylight
2	Dean Martin	Frank Sinatra, B. Swanson Quartet	Let It Snow! Let It Snow! Let It Snow!
3	Joji	The Weeknd	Die For You
4	Lauren Spencer Smith	Miley Cyrus	Flowers
5	Linkin Park	Marshmello, Khalid	Numb
6	Robin Schulz, Oliver Tree	Southstar	Miss You

9. Retrieve a list of songs and their recommended tracks for artists whose names end with the letter 's'.

```
WITH RankedSongs AS (
  SELECT
    artist_s_name,
    track_name,
    LEAD(track_name, 1) OVER (PARTITION BY artist_s_name ORDER BY track_name) AS Next_track_1,
    LEAD(track_name, 2) OVER (PARTITION BY artist_s_name ORDER BY track_name) AS Next_track_2
  FROM
    Song_data
  WHERE
    artist_s_name LIKE '%s';
```

)

SELECT DISTINCT

rs.artist_s_name AS Artist,
rs.track_name AS Popular_track,
rs.Next_track_1 AS Recommend_track,
rs.Next_track_2 AS Second_Recommended_track

FROM

RankedSongs rs

WHERE

rs.artist_s_name LIKE '%s'
AND rs.Next_track_1 IS NOT NULL
AND rs.Next_track_2 IS NOT NULL;

Results Messages				
	Artist	Popular_track	Recommend_track	Second_Recommended_track
1	Arctic Monkeys	505	Do I Wanna Know?	I Wanna Be Yours
2	Arctic Monkeys	Do I Wanna Know?	I Wanna Be Yours	Why'd You Only Call Me When You're High?
3	Bruno Mars	Just The Way You Are	Locked Out Of Heaven	Talking To The Moon
4	Bruno Mars	Locked Out Of Heaven	Talking To The Moon	When I Was Your Man
5	BTS	Born Singer	Butter	Dynamite
6	BTS	Butter	Dynamite	For Youth
7	BTS	Dynamite	For Youth	Permission to Dance
8	BTS	For Youth	Permission to Dance	Run BTS
9	BTS	Permission to Dance	Run BTS	Take Two
10	BTS	Run BTS	Take Two	Yet To Come
11	Harry Styles	Adore You	As It Was	Boyfriends
12	Harry Styles	As It Was	Boyfriends	Cinema
13	Harry Styles	Boyfriends	Cinema	Daydreaming
14	Harry Styles	Cinema	Daydreaming	Daylight
15	Harry Styles	Daydreaming	Daylight	Falling
16	Harry Styles	Daylight	Falling	Golden
17	Harry Styles	Falling	Golden	Grapejuice
18	Harry Styles	Golden	Grapejuice	Keep Driving
19	Harry Styles	Grapejuice	Keep Driving	Late Night Talking
20	Harry Styles	Keep Driving	Late Night Talking	Little Freak
21	Harry Styles	Late Night Talking	Little Freak	Love Of My Life
22	Harry Styles	Little Freak	Love Of My Life	Matilda
23	Harry Styles	Love Of My Life	Matilda	Music For a Sushi Restaurant
24	Harry Styles	Matilda	Music For a Sushi Restaurant	Satellite
25	Harry Styles	Music For a Sushi Restaurant	Satellite	Watermelon Sugar
26	Imagine Dragons	Believer	Bones	Demons
27	NewJeans	Attention	Ditto	Hype Boy
28	NewJeans	Ditto	Hype Boy	New Jeans
29	NewJeans	Hype Boy	New Jeans	OMG
30	NewJeans	New Jeans	OMG	Super Shy
31	Shawn Mendes	It'll Be Okay	There's Nothing Holdin' Me Back	When You're Gone

Query executed successfully.

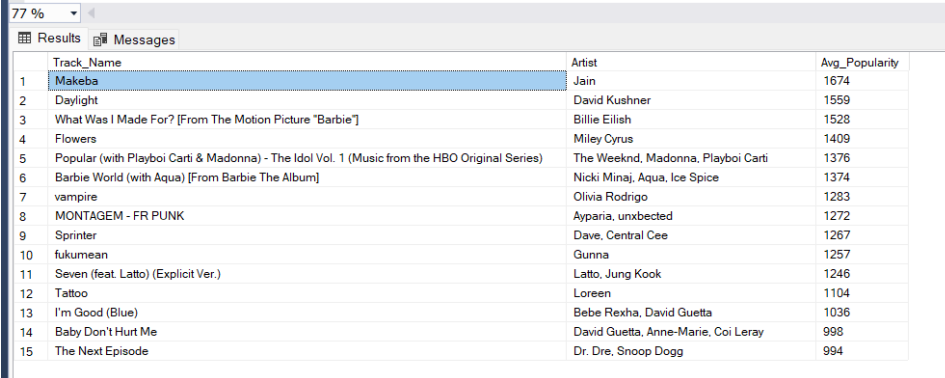
10. Find artist having more than 10 unique songs in 2020 to 2023.

select artist_s_name AS Artist,
Count(distinct track_name) AS uniques_song_count
from song_data
where released_year between 2020 and 2023
group by artist_s_name having count(distinct track_name) > 10
order by 2 desc;

Results Messages		
	Artist	uniques_song_count
1	Taylor Swift	26
2	SZA	19
3	Bad Bunny	19
4	The Weeknd	16
5	Harry Styles	13
6	Kendrick Lamar	11
7	Morgan Wallen	11

11. Find songs based on the average popularity across different charts

```
SELECT TOP 15
    track_name AS Track_Name,
    artist_s_name AS Artist,
    AVG(in_spotify_charts + in_apple_charts + in_deezer_charts + in_shazam_charts) AS Avg_Popularity
FROM
    song_data
GROUP BY
    track_name, artist_s_name
ORDER BY
    Avg_Popularity DESC;
```



The screenshot shows a database query results window with a zoom level of 77%. The window has tabs for 'Results' and 'Messages'. The 'Results' tab is active, displaying a table with 3 columns: 'Track_Name', 'Artist', and 'Avg_Popularity'. The table contains 15 rows of data, with the first row highlighted in blue. The data is as follows:

	Track_Name	Artist	Avg_Popularity
1	Makeba	Jain	1674
2	Daylight	David Kushner	1559
3	What Was I Made For? [From The Motion Picture "Barbie"]	Billie Eilish	1528
4	Flowers	Miley Cyrus	1409
5	Popular (with Playboi Carti & Madonna) - The Idol Vol. 1 (Music from the HBO Original Series)	The Weeknd, Madonna, Playboi Carti	1376
6	Barbie World (with Aqua) [From Barbie The Album]	Nicki Minaj, Aqua, Ice Spice	1374
7	vampire	Olivia Rodrigo	1283
8	MONTAGEM - FR PUNK	Ayparia, unxbected	1272
9	Sprinter	Dave, Central Cee	1267
10	fukumean	Gunna	1257
11	Seven (feat. Latto) (Explicit Ver.)	Latto, Jung Kook	1246
12	Tattoo	Loreen	1104
13	I'm Good (Blue)	Bebe Rexha, David Guetta	1036
14	Baby Don't Hurt Me	David Guetta, Anne-Marie, Coi Leray	998
15	The Next Episode	Dr. Dre, Snoop Dogg	994

12. Find the top 20 artists with the highest total streams on their music.

```
SELECT TOP 20
    artist_s_name AS Artist,
    SUM(streams) AS TotalStreams
FROM
    Song_data
GROUP BY
    artist_s_name
ORDER BY
    TotalStreams Desc;
```

Results		Messages
	Artist	TotalStreams
1	The Weeknd	14185552870
2	Taylor Swift	14053658300
3	Ed Sheeran	13908947204
4	Harry Styles	11608645649
5	Bad Bunny	9997799607
6	Olivia Rodrigo	7442148916
7	Eminem	6183805596
8	Bruno Mars	5846920599
9	Arctic Monkeys	5569806731
10	Imagine Dragons	5272484650
11	Lewis Capaldi	4734698360
12	Doja Cat	4702294655
13	SZA	4557811204
14	Adele	4508746590
15	BTS	4389891591
16	The Neighbour...	4010009939
17	Justin Bieber	3919813522
18	Coldplay	3825176058
19	Avicii	3426754746
20	Dua Lipa	3227639000

Query executed successfully.

13. How the monthly trend of streams for the chosen artist

```

SELECT released_year,
    DATENAME(MONTH, DATEADD(MONTH, released_month, 0) - 1) as realeased_month,
    SUM(streams) AS MonthlyTotalStreams
FROM
    song_data
WHERE
    artist_s_name= 'Ed Sheeran' and released_year = 2023
GROUP BY
    released_year,
    DATENAME(MONTH, DATEADD(MONTH, released_month, 0) - 1)
ORDER BY
    released_year ASC, DATENAME(MONTH, DATEADD(MONTH, released_month, 0) - 1)ASC;

```

77 %

Results

Messages

	released_year	realeased_month	MonthlyTotalStreams
1	2023	March	195576623
2	2023	May	39893489

14. Top 5 Artists with the Most Songs in Spotify and apple Playlists:

```

with songCount as(
select artist_s_name,
    Sum(Case when in_spotify_playlists > 0 then 1 else 0 end) as Spotify_playlist_count,
    Sum( Case when in_apple_playlists > 0 then 1 else 0 end) Apple_playlist_count
from song_data

```

```
group by artist_s_name  
)
```

```
select top 5 sc.artist_s_name As Artists,  
sum(spotify_playlist_count) As Total_Songs_in_Spotify_playlist,  
sum(Apple_playlist_count) As Total_Songs_in_Apple_playlist  
from songCount sc  
group by artist_s_name , Spotify_playlist_count  
order by (SUM(sc.Apple_playlist_count) + SUM(sc.Spotify_playlist_count)) DESC;
```

77 %			
Results Messages			
	Artists	Total_Songs_in_Spotify_playlist	Total_Songs_in_Apple_playlist
1	Taylor Swift	34	34
2	The Weeknd	22	20
3	Bad Bunny	19	19
4	SZA	19	18
5	Harry Styles	17	17