

Query #1

SQL:

```
SELECT SongsInPlaylists.playlistID,  
SongsInPlaylists.songOrder,  
Songs.songName AS song,  
Artists.artistName AS artist  
FROM ((SongsInPlaylists INNER JOIN  
Songs ON SongsInPlaylists.songID = Songs.ID)  
INNER JOIN SongsToArtists ON Songs.SID =  
WHERE SongsInPlaylists.playlistID = 1  
ORDER BY SongsInPlaylists.songOrder;
```

TRANSLATION:

What are the songs and artists that will be played in order for playlist 1?

USE CASE:

To start off we are beginning with likely the most common query in a music database. What are the songs and artists in a given playlist.

playlistID	songOrder	song	artist
1	1	Mi Ultima Carta	Prince Royce
1	2	As I Am (feat. Khalid)	Khalid
1	2	As I Am (feat. Khalid)	Justin Bieber
1	3	Love Me Harder	The Weeknd
1	3	Love Me Harder	Ariana Grande
1	4	Haven't Met You Yet	Michael Buble
1	5	The Less I Know The Better	Tame Impala
1	6	Begin Again	Taylor Swift
1	7	Love Won't Wait	Bobby Caldwell
1	8	Billie Jean	Michael Jackson
1	9	Get Em High	Common
1	9	Get Em High	Talib Kweli
1	9	Get Em High	Kanye West
1	10	Do I Wanna Know?	Arctic Monkeys

Query #2

SQL:

```
SELECT Artists.artistName, SongsToArtists.artistRole,  
COUNT(SongsToArtists.artistRole) AS roleCount  
FROM Artists INNER JOIN SongsToArtists  
ON Artists.AID = SongsToArtists.artistID  
GROUP BY Artists.artistName, SongsToArtists.artistRole;
```

TRANSLATION:

In how many songs are all the artists considered to be a primary, co-lead or feature?

USE CASE:

To see what common artists appear in a playlist. We distinguish primary, co-lead, and feature to not skew the data.

artistName	artistRole	roleCount
A\$AP Ferg	Co-Lead	1
A\$AP Rocky	Feature	1
Andre 3000	Co-Lead	1
Arctic Monkeys	Primary	5
Ariana Grande	Primary	15
Bad Bunny	Primary	12
Benny Blanco	Co-Lead	1
Beyonce	Primary	12
Big Sean	Co-Lead	3
Bobby Caldwell	Primary	5
Bruno Mars	Co-Lead	1
Bruno Mars	Primary	13
BTS	Primary	8
Bun B	Feature	1
Burna Boy	Feature	1
Cardi B	Co-Lead	1

Query #3

SQL:

```
SELECT Albums.albumName AS album,  
       Artists.artistName AS artist,  
       Albums.isExplicit AS nonExplicit  
FROM (Albums INNER JOIN Artists  
      ON Albums.artistID = Artists.AID)  
INNER JOIN ReleaseYears  
      ON Albums.releaseYearID = ReleaseYears.RYID  
Where Albums.isExplicit = NO  
AND ReleaseYears.year BETWEEN 2010 and 2019;
```

TRANSLATION:

Find the albums that are not explicit and were released during the 2010s

USE CASE:

This is a query representing a user who is searching for specific songs. In this case we specify the time period and also whether its explicit. This could be used for finding the right music for any gathering.

album	artist	nonExplicit
Prince Royce	Prince Royce	<input type="checkbox"/>
Doo-Wops & Hooligans	Bruno Mars	<input type="checkbox"/>
Speak Now	Taylor Swift	<input type="checkbox"/>
My World 2.0	Justin Bieber	<input type="checkbox"/>
All of You	Colbie Caillat	<input type="checkbox"/>
Swim Good	Frank Ocean	<input type="checkbox"/>
Lonerism	Tame Impala	<input type="checkbox"/>
Red	Taylor Swift	<input type="checkbox"/>
Believe	Justin Bieber	<input type="checkbox"/>
AM	Arctic Monkeys	<input type="checkbox"/>
Yours Truly	Ariana Grande	<input type="checkbox"/>
Gypsy Heart	Colbie Caillat	<input type="checkbox"/>
Substances	IC3PEAK	<input type="checkbox"/>
My Everything	Ariana Grande	<input type="checkbox"/>
XSCAPE	Michael Jackson	<input type="checkbox"/>
Traveller	Chris Stapleton	<input type="checkbox"/>
FourFiveSeconds	Rihanna	<input type="checkbox"/>
Purpose	Justin Bieber	<input type="checkbox"/>
Wings	BTS	<input type="checkbox"/>
24k Magic	Bruno Mars	<input type="checkbox"/>
FALLAL	IC3PEAK	<input type="checkbox"/>

Query #4

SQL:

```
SELECT Playlists.PID, Playlists.playlistName
FROM Playlists
WHERE EXISTS (SELECT Songs.songName
FROM Songs
INNER JOIN SongsInPlaylists
ON SongsInPlaylists.songID = Songs.SID
WHERE SongsInPlaylists.playlistID = Playlists.PID
AND Songs.songName = "Can't Feel My Face");
```

TRANSLATION:

In which playlist does the song "Can't Feel My Face" appear in?

USE CASE:

When too many playlists make your dashboard cluttered you may locate the right playlist using a song you remember existed in that playlist.

(Query 4) Find Song in Playlist		(Query 4) Find Song in Playlist (Proof)	
PID	playlistName		
5	Party Hits		
6	Road Trip Tunes		
*			

Query #5

SQL:

```
SELECT Playlists.playlistName, Genres.genreName,  
COUNT(Songs.SID) AS songCount  
FROM ((SongsInPlaylists INNER JOIN Songs  
ON SongsInPlaylists.songID = Songs.SID)  
INNER JOIN Genres ON Songs.genreID = Genres.GID)  
INNER JOIN Playlists ON  
SongsInPlaylists.playlistID = Playlists.PID  
WHERE Playlists.playlistName = "Rap Legends"  
AND Genres.genreName = 'Pop'  
GROUP BY Playlists.playlistName, Genres.genreName  
ORDER BY COUNT(Songs.SID) DESC;
```

TRANSLATION:

What number of songs in the pop genre is in Rap Legends (playlist 13) in descending order?

USE CASE:

A playlist can be very diverse, having many different genres of songs, but you may be interested in knowing what genres appear the most in that playlist.

(Query 5) Rap Legend Pop		
playlistName	genreName	songCount
Rap Legends	Pop	9

Query #6

SQL:

```
SELECT Follower.UID AS followerID,  
Follower.userFirstName AS followerFirstName,  
Follower.userLastName AS followerLastName,  
Following.UID AS followingID,  
Following.userFirstName AS followingFirstName,  
Following.userLastName AS followingLastName  
FROM Users AS Follower INNER JOIN  
(Users AS Following INNER JOIN FollowingUsers  
ON Following.UID = FollowingUsers.followedID)  
ON Follower.UID = FollowingUsers.followerID  
ORDER BY Follower.UID, Following.UID;
```

TRANSLATION:

Which users are following other users?

USE CASE:

Serves in analyzing social connections within the platform.

(Query 6) Who Follows Who?					
followerID	followerFirst	followerLast	followingID	followingFirst	followingLast
1	John	Smith	3	Michael	Brown
1	John	Smith	5	David	Miller
1	John	Smith	6	Jessica	Wilson
2	Sarah	Johnson	1	John	Smith
2	Sarah	Johnson	4	Emily	Williams
3	Michael	Brown	2	Sarah	Johnson
3	Michael	Brown	6	Jessica	Wilson
4	Emily	Williams	7	Andrew	Martinez
5	David	Miller	3	Michael	Brown
5	David	Miller	8	Megan	Anderson
6	Jessica	Wilson	2	Sarah	Johnson
6	Jessica	Wilson	5	David	Miller
7	Andrew	Martinez	4	Emily	Williams
7	Andrew	Martinez	10	Ashley	White
8	Megan	Anderson	5	David	Miller
8	Megan	Anderson	7	Andrew	Martinez
9	Chris	Thomas	4	Emily	Williams
9	Chris	Thomas	11	Ryan	Harris
11	Ryan	Harris	8	Megan	Anderson
11	Ryan	Harris	9	Chris	Thomas
11	Ryan	Harris	14	Hannah	Robinson
12	Lauren	Martin	10	Ashley	White
12	Lauren	Martin	13	Brandon	Garcia
13	Brandon	Garcia	12	Lauren	Martin
13	Brandon	Garcia	15	Ethan	Clark
14	Hannah	Robinson	11	Ryan	Harris
14	Hannah	Robinson	16	Madison	Rodriguez
16	Madison	Rodriguez	14	Hannah	Robinson
16	Madison	Rodriguez	18	Olivia	Lee
17	Logan	Lewis	15	Ethan	Clark