

MeloTunes

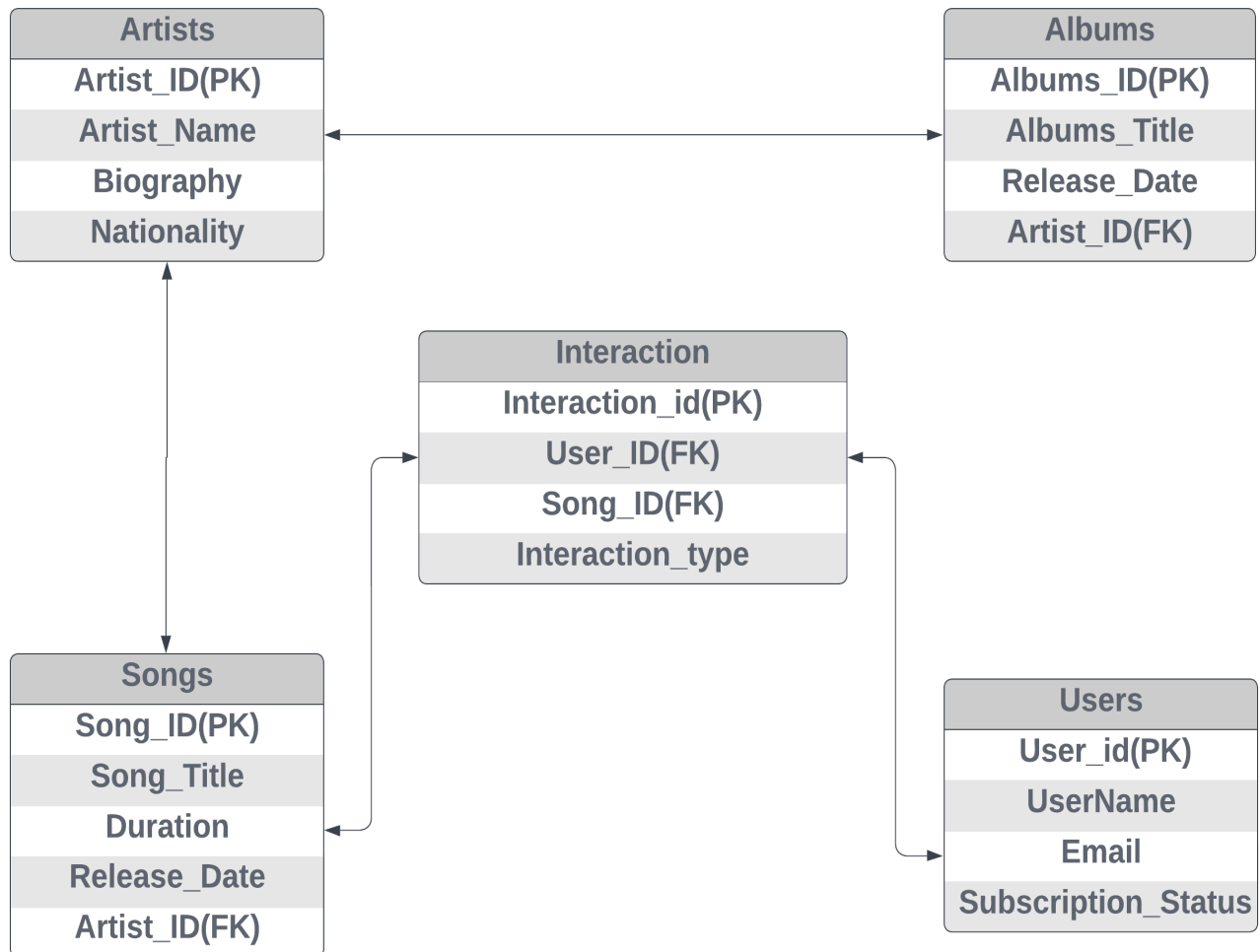
MeloTunes (music streaming service) wants to create a database to manage songs, artists, albums, users, and user interactions. They need a system that can handle song information, artist details, albums details, user profiles, and user interactions such as likes and comments.

The database should allow the music streaming service to:

- Store information about Songs, including song ID, title, duration, release date, and artist ID.
- Maintain a record of Artists, including artist ID, name, biography, and nationality.
- Store information about Albums, including album id, title, release date, artist ID.
- Store User details, including user ID, username, email, and subscription status.
- Track User interactions, such as likes and comments, including interaction ID, user ID, song ID, and interaction type.



ER Diagram



Structure of Tables

ARTISTS:

This table contains the details of all Artists such as Artist_ID, Artist_Name, Biography and Nationality.

Syntax: Desc Artists;

```
MariaDB [MeloTunes]> desc Artists;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Artist_ID  | int(11)   | NO   | PRI | NULL    |       |
| Artist_Name | varchar(100) | YES  |     | NULL    |       |
| Biography   | varchar(100) | YES  |     | NULL    |       |
| Nationality | varchar(50) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.047 sec)
```

ALBUMS:

This table contains the details of all Albums such as Albums_ID, Albums_Title, Release_Date and Artist_ID.

Syntax: Desc Albums;

```
MariaDB [MeloTunes]> desc Albums;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Albums_ID  | int(11)   | NO   | PRI | NULL    |       |
| Albums_Title | varchar(100) | YES  |     | NULL    |       |
| Release_Date | date      | YES  |     | NULL    |       |
| Artist_ID  | int(11)   | YES  | MUL | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.024 sec)
```

SONGS:

This table contains the details of all Songs such as Song_ID, Song_Title, Duration, Release_Date and Artist_ID.

Syntax: Desc Songs;

```
MariaDB [MeloTunes]> desc Songs;
```

Field	Type	Null	Key	Default	Extra
Song_ID	int(11)	NO	PRI	NULL	
Song_Title	varchar(100)	YES		NULL	
Duration	time	YES		NULL	
Release_Date	date	YES		NULL	
Artist_ID	int(11)	YES	MUL	NULL	

5 rows in set (0.022 sec)

USERS:

This table contains the details of all Users such as User_id, UserName, Email, Subscription_Status.

Syntax: Desc Users;

```
MariaDB [MeloTunes]> desc Users;
```

Field	Type	Null	Key	Default	Extra
User_id	int(11)	NO	PRI	NULL	
UserName	varchar(50)	YES		NULL	
Email	varchar(100)	YES		NULL	
Subscription_Status	varchar(50)	YES		NULL	

4 rows in set (0.024 sec)

INTERACTION:

This table contains the details of all Interaction such as , Interaction_ID, User_ID, Songs_ID, Interaction_type.

Syntax: Desc Interaction;

```
MariaDB [MeloTunes]> desc interaction;
```

Field	Type	Null	Key	Default	Extra
Interaction_ID	int(11)	NO	PRI	NULL	
User_ID	int(11)	YES	MUL	NULL	
Song_ID	int(11)	YES	MUL	NULL	
Interaction_type	varchar(50)	YES		NULL	

4 rows in set (0.023 sec)

Contents of Tables

ARTISTS:

Syntax: Select * from Artists;

MariaDB [MeloTunes]> Select * from Artists;

Artist_ID	Artist_Name	Biography	Nationality
101	Shawn Mendes	A Juno-winning and Grammy-nominated pop singer/songwriter.	Canadian
102	Charlie Puth	An American singer, songwriter, and record producer.	American
103	Harry Styles	A songwriter and actor,one of the members of boyband OneDirection.	British
104	Arjit Singh	An Indian playback singer and music composer.	Indian
105	Armaan Malik	An Indian singer, songwriter, record producer & actor.	Indian
106	ED Sheeran	A singer/songwriter creating a sound that is idiosyncratic and personal.	British
107	Lewis Capaldi	A Critics Choice Award nominated singer-songwriter and musician.	Scottish
108	Nail Horan	Born on 13 September 1993 Nail is an Irish singer-songwriter.	Irish
109	Justin Bieber	Singer recognized for his genre-melding musicianship and global influence.	Canadian
110	A.R Rahman	An Indian music composer,singer,songwriter,musician,multi-instrumentalist.	Indian
111	Taylor Swift	An singer-songwriter recognized for her songwriting,musical versatility.	American
112	Dua Lipa	An English and Albanian singer and songwriter.	British
113	John Legend	An American singer, songwriter, pianist,record producer and Actor.	American
114	Darshan Rawal	An Indian singer,known for his work in different languages.	Indian
115	Camila Cabello	An American singer and songwriter,member of the girl group Fifth Harmony.	Cuba
116	Selena Gomez	An American singer, actress, producer, and businesswoman.	American
117	The Weekend	is a Canadian singer, songwriter and actor,Born and raised in Toronto.	Canadian
118	Adele	Adele is one of the worlds best-selling music artists,an English singer-songwriter.	British
119	Amit Trivedi	An Indian music director, singer, film scorer, music producer and lyricist.	Indian
120	Zayn	English singer and former member of the boyband One Direction.	American

20 rows in set (0.012 sec)

ALBUMS:

Syntax: Select * from Albums;

```
MariaDB [MeloTunes]> Select * from Albums;
```

Albums_ID	Albums_Title	Release_Date	Artist_ID
201	Nobody is Listening	2021-01-15	120
202	Harrys House	2022-05-20	103
203	Tamasha	2015-10-16	110
204	Wonder	2020-12-07	101
205	21	2011-01-24	118
206	Lover	2011-01-24	111
207	Arman Malik	2014-01-01	105
208	Love in the Future	2013-08-30	113
209	Before You Go	2019-11-19	107
210	Charlie	2022-10-07	102
211	Illuminate	2017-05-20	101
212	Future Nostalgia	2022-03-27	112
213	Dear Zindagi	2016-11-15	119
214	Romance	2019-12-06	115
215	Fine Line	2019-12-13	103
216	MidNight	2023-05-26	111
217	Rokstar	2011-10-01	110
218	Divide	2017-03-03	106
219	Starboy	2016-11-25	117
220	Red	2012-10-22	111
221	Justice	2021-03-19	109
222	Ek Main Aur Ekk Tu	2011-12-29	119
223	Rare	2020-01-10	116
224	Voicenotes	2018-05-11	102
225	Purpose	2015-11-13	109

25 rows in set (0.001 sec)

SONGS:

Syntax: Select * from Songs;

```
MariaDB [MeloTunes]> Select * from Songs;
```

Song_ID	Song_Title	Duration	Release_Date	Artist_ID
301	One Call Away	00:03:14	2022-10-07	102
302	Love You Zindagi	00:03:52	2016-11-15	104
303	Perfect	00:03:15	2017-03-03	106
304	Ghost	00:02:33	2021-03-19	109
305	Summer Of Love	00:03:01	2022-12-07	101
306	All of Me	00:04:30	2013-08-30	113
307	Chogada	00:03:50	2011-10-01	110
308	IceCream	00:03:03	2020-01-10	116
309	Tu Hi Hai	00:03:19	2016-11-15	119
310	As It Was	00:02:46	2019-12-03	103
311	There is nothing holding me back	00:03:58	2017-04-20	101
312	Boldo Na Zara	00:04:05	2014-01-01	105
313	Midnight Rain	00:02:55	2019-08-23	111
314	Senorita	00:03:11	2019-12-06	115
315	When Loves Around	00:03:12	2021-01-15	120
316	Main Ragoon Ya Na Ragoon	00:06:47	2011-10-01	110
317	Easy on me	00:05:32	2011-01-24	118
318	Baby	00:03:40	2015-11-13	109
319	To much to ask	00:03:46	2017-11-10	108
320	Nothing without you	00:02:46	2016-11-25	117
321	Red	00:03:41	2012-10-22	111
322	Levitating	00:03:51	2022-03-27	112
323	What makes you beautiful	00:03:27	2022-05-20	103
324	Ek main aur ek tu	00:02:43	2011-12-29	119
325	Night Changes	00:04:01	2021-01-15	120
326	Sooraj Dooba Hai	00:04:08	2015-08-08	104
327	Before You Go	00:04:14	2019-11-09	107
328	Asel Mein	00:03:22	2022-03-16	114
329	Pyaar Hota Kayi Baar Hai	00:03:03	2023-03-22	104
330	Raanjhana	00:03:55	2015-10-16	110

30 rows in set (0.000 sec)

USERS:

Syntax: Select * from Users;

```
MariaDB [MeloTunes]> Select * from Users;
```

User_id	UserName	Email	Subscription_Status
401	Ruchira Hodavadekar	ruchirahodavadekar321@gmail.com	Premium
402	Adishri Dhuri	dhuriadishri13@gmail.com	Basic
403	Manvi Khuswaha	manvikushwaha06@gmail.com	Premium
404	Siddhesh Belalekar	belalekar@gmail.com	Free
405	Samruddhi Hodavadekar	samruddhihodavadekar321@gmail.com	Free
406	Seema Arolkar	arolkars1234@gmail.com	Basic
407	Malhar Rane	raneprasad18@gmail.com	Premium
408	Sakshee Ghag	ghaggsakshi@gmail.com	Free
409	Rohan Naik	naikkrohan13@gmail.com	Basic
410	Sanit Kadam	kaddaamsanit@gmail.com	Basic
411	Sanika Sanaye	sanusanaye89@gmail.com	Premium
412	Samiksha Gawade	gawdeesamiksha67@gmail.com	Free
413	Vinit Parab	vinitpparab321@gmail.com	Basic
414	Kushal Singh	singhkuushal@gmail.com	Premium
415	Yash Kulkarni	kulkarniyashh43@gmail.com	Free
416	Bhumika Sharma	bhumisharma356@gmail.com	Free
417	Prathamesh Belalekar	belalekarpratu98@gmail.com	Free
418	Chintan Dhuri	dhurichintan30@gmail.com	Premium
419	Sheetal Varma	vermasheetu1326@gmail.com	Premium
420	Vishakha Jaiswal	vishakha06jaiswal@gmail.com	Basic
421	Sakshi Wagh	sakshiwaghh@gmail.com	Free
422	Raj Tripathi	tripatiraaaj54@gmail.com	Premium
423	Mohan Chavan	chavanmohhan09@gmail.com	Basic
424	Sanokshi Sonavane	sonavanesona67@gmail.com	Free
425	Sarita Arolar	arolkarsarita12@gmail.com	Basic

```
25 rows in set (0.001 sec)
```

INTERACTION:

Syntax: Select * from Interaction;

```
MariaDB [MeloTunes]> Select * from Interaction;
```

Interaction_ID	User_ID	Song_ID	Interaction_type
501	425	320	Like
502	420	301	Comment
503	404	315	Like
504	410	319	Share
505	421	308	Share
506	408	328	Comment
507	417	305	Like
508	420	315	Like
509	418	315	Share
510	408	324	Comment
511	424	303	Share
512	404	310	Like
513	409	314	Comment
514	411	329	Comment
515	422	321	Share
516	419	307	Share
517	425	309	Comment
518	401	330	Like
519	413	323	Like
520	425	309	Comment

```
20 rows in set (0.001 sec)
```

Subqueries

1) Retrieve the count of songs for a specific artist. (SingleRowSubQuery)

Syntax: Select count(*) from Songs where artist_id = (Select artist_id from Artists where Artist_name ='Shawn Mendes');

```
MariaDB [MeloTunes]> Select count(*) from Songs
  -> where artist_id = (Select artist_id from Artists where Artist_name ='Shawn Mendes');
+-----+
| count(*) |
+-----+
|         2 |
+-----+
1 row in set (0.001 sec)
```

2) Retrieve all songs that have a longer duration than all songs by a specific artist.(MultiRowSubQuery)

Syntax: Select * from Songs where duration > ALL (select duration from Songs where artist_id = 111);

```
MariaDB [MeloTunes]> (select * from Songs where artist_id = 111);
+-----+-----+-----+-----+-----+
| Song_ID | Song_Title | Duration | Release_Date | Artist_ID |
+-----+-----+-----+-----+-----+
|      313 | Midnight Rain | 00:02:55 | 2019-08-23 |      111 |
|      321 | Red | 00:03:41 | 2012-10-22 |      111 |
+-----+-----+-----+-----+-----+
2 rows in set (0.000 sec)

MariaDB [MeloTunes]> select * from Songs
  -> where duration > ALL (select duration from Songs where artist_id = 111);
+-----+-----+-----+-----+-----+
| Song_ID | Song_Title | Duration | Release_Date | Artist_ID |
+-----+-----+-----+-----+-----+
|      302 | Love You Zindagi | 00:03:52 | 2016-11-15 |      104 |
|      306 | All of Me | 00:04:30 | 2013-08-30 |      113 |
|      307 | Chogada | 00:03:50 | 2011-10-01 |      110 |
|      311 | There is nothing holding me back | 00:03:58 | 2017-04-20 |      101 |
|      312 | Boldo Na Zara | 00:04:05 | 2014-01-01 |      105 |
|      316 | Main Ragoon Ya Na Ragoon | 00:06:47 | 2011-10-01 |      110 |
|      317 | Easy on me | 00:05:32 | 2011-01-24 |      118 |
|      319 | To much to ask | 00:03:46 | 2017-11-10 |      108 |
|      322 | Levitating | 00:03:51 | 2022-03-27 |      112 |
|      325 | Night Changes | 00:04:01 | 2021-01-15 |      120 |
|      326 | Sooraj Dooba Hai | 00:04:08 | 2015-08-08 |      104 |
|      327 | Before You Go | 00:04:14 | 2019-11-09 |      107 |
|      330 | Raanjhana | 00:03:55 | 2015-10-16 |      110 |
+-----+-----+-----+-----+-----+
13 rows in set (0.001 sec)
```

3) Retrieve all users who have interacted with songs from artists that have not released any albums.(FiveTableSubQuery)

Syntax: Select * from Users where User_id IN (Select User_id from Interaction where Song_id IN (Select Song_id from Songs where Artist_id IN (Select Artist_id from Artists where Artist_id NOT IN (Select Artist_id from Albums))));

```
MariaDB [MeloTunes]> Select Artist_id from Albums;
+-----+
| Artist_id |
+-----+
|      101  |
|      101  |
|      102  |
|      102  |
|      103  |
|      103  |
|      105  |
|      106  |
|      107  |
|      109  |
|      109  |
|      110  |
|      110  |
|      111  |
|      111  |
|      111  |
|      112  |
|      113  |
|      115  |
|      116  |
|      117  |
|      118  |
|      119  |
|      119  |
|      120  |
+-----+
25 rows in set (0.041 sec)
```

```
MariaDB [MeloTunes]> (Select * from Artists where Artist_id NOT IN (Select Artist_id from Albums));
```

Artist_ID	Artist_Name	Biography	Nationality
104	Arjit Singh	An Indian playback singer and music composer.	Indian
108	Nail Horan	Born on 13 September 1993 Nail is an Irish singer-songwriter.	Irish
114	Darshan Rawal	An Indian singer,known for his work in different languages.	Indian

3 rows in set (0.001 sec)

```
MariaDB [MeloTunes]> (Select * from Songs where Artist_id IN  
-> (Select Artist_id from Artists where Artist_id NOT IN (Select Artist_id from Albums)));
```

Song_ID	Song_Title	Duration	Release_Date	Artist_ID
302	Love You Zindagi	00:03:52	2016-11-15	104
319	To much to ask	00:03:46	2017-11-10	108
326	Sooraj Dooba Hai	00:04:08	2015-08-08	104
328	Asel Mein	00:03:22	2022-03-16	114
329	Pyaar Hota Kayi Baar Hai	00:03:03	2023-03-22	104

5 rows in set (0.001 sec)

```
MariaDB [MeloTunes]> Select * from Interaction where Song_id IN  
-> (Select Song_id from Songs where Artist_id IN  
-> (Select Artist_id from Artists where Artist_id NOT IN (Select Artist_id from Albums)))  
-> ;
```

Interaction_ID	User_ID	Song_ID	Interaction_type
504	410	319	Share
506	408	328	Comment
514	411	329	Comment

3 rows in set (0.001 sec)

```
MariaDB [MeloTunes]> Select * from Users  
-> where User_id IN (Select User_id from Interaction where Song_id IN  
-> (Select Song_id from Songs where Artist_id IN  
-> (Select Artist_id from Artists where Artist_id NOT IN (Select Artist_id from Albums))));
```

User_id	UserName	Email	Subscription_Status
408	Sakshee Ghag	ghaggsakshi@gmail.com	Free
410	Sanit Kadam	kaddaamsanit@gmail.com	Basic
411	Sanika Sanaye	sanusanaye89@gmail.com	Premium

3 rows in set (0.003 sec)

4) Retrieve all songs details for the ones whose artist_id is between 110 and 116 and duration is between '00:03:00' and '00:03:20'.(MultiColumnSubQuery)

Syntax: Select * from Songs where (artist_id, duration) IN (Select artist_id,duration from Songs where artist_id between 110 and 116 and duration between '00:03:00' and '00:03:20')order by Song_title;

```
MariaDB [MeloTunes]> Select * from Songs
-> where (artist_id, duration) IN
-> (Select artist_id,duration from Songs where artist_id between 110 and 116 and
-> duration between '00:03:00' and '00:03:20'
-> )order by Song_title;
```

Song_ID	Song_Title	Duration	Release_Date	Artist_ID
308	IceCream	00:03:03	2020-01-10	116
314	Senorita	00:03:11	2019-12-06	115

2 rows in set (0.001 sec)

5) Retrieve the songs with the highest duration for each artist.(MultiColumnSubQuery)

Syntax: Select * from Songs where (artist_id, duration) IN (Select artist_id, MAX(duration) from Songs GROUP BY artist_id);

```
MariaDB [MeloTunes]> Select * from Songs
-> where (artist_id, duration) IN
-> (Select artist_id, MAX(duration) from Songs GROUP BY artist_id);
```

Song_ID	Song_Title	Duration	Release_Date	Artist_ID
301	One Call Away	00:03:14	2022-10-07	102
303	Perfect	00:03:15	2017-03-03	106
306	All of Me	00:04:30	2013-08-30	113
308	IceCream	00:03:03	2020-01-10	116
309	Tu Hi Hai	00:03:19	2016-11-15	119
311	There is nothing holding me back	00:03:58	2017-04-20	101
312	Boldo Na Zara	00:04:05	2014-01-01	105
314	Senorita	00:03:11	2019-12-06	115
316	Main Ragoon Ya Na Ragoon	00:06:47	2011-10-01	110
317	Easy on me	00:05:32	2011-01-24	118
318	Baby	00:03:40	2015-11-13	109
319	To much to ask	00:03:46	2017-11-10	108
320	Nothing without you	00:02:46	2016-11-25	117
321	Red	00:03:41	2012-10-22	111
322	Levitating	00:03:51	2022-03-27	112
323	What makes you beautiful	00:03:27	2022-05-20	103
325	Night Changes	00:04:01	2021-01-15	120
326	Sooraj Dooba Hai	00:04:08	2015-08-08	104
327	Before You Go	00:04:14	2019-11-09	107
328	Asel Mein	00:03:22	2022-03-16	114

20 rows in set (0.001 sec)

6) Retrieve the songs that have been liked by users who are subscribed to a premium plan.(ThreeTableSubQuery)

Syntax: Select * from Songs Where song_id IN (Select song_id from Interaction Where user_id IN (Select user_id from Users Where subscription_status = 'premium') AND interaction_type = 'like');

```
MariaDB [MeloTunes]> (Select * from Users Where subscription_status = 'premium');
```

User_id	UserName	Email	Subscription_Status
401	Ruchira Hodavadekar	ruchirahodavadekar321@gmail.com	Premium
403	Manvi Khuswaha	manvikushwaha06@gmail.com	Premium
407	Malhar Rane	raneprasad18@gmail.com	Premium
411	Sanika Sanaye	sanusanaye89@gmail.com	Premium
414	Kushal Singh	singhkuushal@gmail.com	Premium
418	Chintan Dhuri	dhurichintan30@gmail.com	Premium
419	Sheetal Varma	vermasheetu1326@gmail.com	Premium
422	Raj Tripathi	tripatiraaaaj54@gmail.com	Premium

```
8 rows in set (0.000 sec)
```



```
MariaDB [MeloTunes]> Select * from Interaction Where user_id IN  
-> (Select user_id from Users Where subscription_status = 'premium')  
-> AND interaction_type = 'like';
```

Interaction_ID	User_ID	Song_ID	Interaction_type
518	401	330	Like

```
1 row in set (0.001 sec)
```



```
MariaDB [MeloTunes]> Select* from Songs  
-> Where song_id IN (Select song_id from Interaction Where user_id IN  
-> (Select user_id from Users Where subscription_status = 'premium')  
-> AND interaction_type = 'like');
```

Song_ID	Song_Title	Duration	Release_Date	Artist_ID
330	Raanjhana	00:03:55	2015-10-16	110

```
1 row in set (0.001 sec)
```

Joins

1) Display the details of songs and their respective interactions .(InnerJoin)

Syntax: Select Songs.Song_id, Songs.Song_title,Interaction.interaction_id, Interaction.interaction_type from Songs INNER JOIN Interaction ON Songs.song_id = Interaction.song_id;

```
MariaDB [MeloTunes]> Select Songs.Song_id, Songs.Song_title,Interaction.interaction_id, Interaction.interaction_type
-> from Songs INNER JOIN Interaction ON Songs.song_id = Interaction.song_id;
```

Song_id	Song_title	interaction_id	interaction_type
320	Nothing without you	501	Like
301	One Call Away	502	Comment
315	When Loves Around	503	Like
319	To much to ask	504	Share
308	IceCream	505	Share
328	Asel Mein	506	Comment
305	Summer Of Love	507	Like
315	When Loves Around	508	Like
315	When Loves Around	509	Share
324	Ek main aur ek tu	510	Comment
303	Perfect	511	Share
310	As It Was	512	Like
314	Senorita	513	Comment
329	Pyaar Hota Kayi Baar Hai	514	Comment
321	Red	515	Share
307	Chogada	516	Share
309	Tu Hi Hai	517	Comment
330	Raanjhana	518	Like
323	What makes you beautiful	519	Like
309	Tu Hi Hai	520	Comment

20 rows in set (0.001 sec)

2) Display all songs with interaction type as 'comment' from the Songs table.(LeftJoin)

Syntax: Select Songs.song_id, Songs.song_title, Interaction.interaction_type from Songs
LEFT JOIN Interaction ON Songs.song_id = Interaction.song_id and Interaction.interaction_type =
'comment' where Interaction.song_id IS NOT NULL;

```
MariaDB [MeloTunes]> Select Songs.song_id, Songs.song_title, Interaction.interaction_type from Songs  
-> LEFT JOIN Interaction ON Songs.song_id = Interaction.song_id ;
```

song_id	song_title	interaction_type
301	One Call Away	Comment
302	Love You Zindagi	NULL
303	Perfect	Share
304	Ghost	NULL
305	Summer Of Love	Like
306	All of Me	NULL
307	Chogada	Share
308	IceCream	Share
309	Tu Hi Hai	Comment
309	Tu Hi Hai	Comment
310	As It Was	Like
311	There is nothing holding me back	NULL
312	Boldo Na Zara	NULL
313	Midnight Rain	NULL
314	Senorita	Comment
315	When Loves Around	Like
315	When Loves Around	Like
315	When Loves Around	Share
316	Main Ragoon Ya Na Ragoon	NULL
317	Easy on me	NULL
318	Baby	NULL
319	To much to ask	Share
320	Nothing without you	Like
321	Red	Share
322	Levitating	NULL
323	What makes you beautiful	Like
324	Ek main aur ek tu	Comment
325	Night Changes	NULL
326	Sooraj Dooba Hai	NULL
327	Before You Go	NULL
328	Asel Mein	Comment
329	Pyaar Hota Kayi Baar Hai	Comment
330	Raanjhana	Like

```
33 rows in set (0.001 sec)
```

```
MariaDB [MeloTunes]> Select Songs.song_id, Songs.song_title, Interaction.interaction_type  
-> from Songs  
-> LEFT JOIN Interaction ON Songs.song_id = Interaction.song_id  
-> and Interaction.interaction_type = 'comment'  
-> where Interaction.song_id IS NOT NULL;
```

song_id	song_title	interaction_type
301	One Call Away	Comment
328	Asel Mein	Comment
324	Ek main aur ek tu	Comment
314	Senorita	Comment
329	Pyaar Hota Kayi Baar Hai	Comment
309	Tu Hi Hai	Comment
309	Tu Hi Hai	Comment

```
7 rows in set (0.001 sec)
```

3) Display a list of all interaction along with User where the user subscription_type is 'free'.(RightJoin)

Syntax: Select Users.user_id, Users.username, Users.Subscription_Status, Interaction.interaction_id, Interaction.interaction_type from Users RIGHT JOIN Interaction ON Users.user_id= Interaction.user_id where Users.Subscription_Status = 'free';

```
MariaDB [MeloTunes]> Select Users.user_id, Users.username, Users.Subscription_Status,
-> Interaction.interaction_id, Interaction.interaction_type from Users
-> RIGHT JOIN Interaction ON Users.user_id= Interaction.user_id;
```

user_id	username	Subscription_Status	interaction_id	interaction_type
425	Sarita Arolar	Basic	501	Like
420	Vishakha Jaiswal	Basic	502	Comment
404	Siddhesh Belalekar	Free	503	Like
410	Sanit Kadam	Basic	504	Share
421	Sakshi Wagh	Free	505	Share
408	Sakshee Ghag	Free	506	Comment
417	Prathamesh Belalekar	Free	507	Like
420	Vishakha Jaiswal	Basic	508	Like
418	Chintan Dhuri	Premium	509	Share
408	Sakshee Ghag	Free	510	Comment
424	Sanokshi Sonavane	Free	511	Share
404	Siddhesh Belalekar	Free	512	Like
409	Rohan Naik	Basic	513	Comment
411	Sanika Sanaye	Premium	514	Comment
422	Raj Tripathi	Premium	515	Share
419	Sheetal Varma	Premium	516	Share
425	Sarita Arolar	Basic	517	Comment
401	Ruchira Hodavadekar	Premium	518	Like
413	Vinit Parab	Basic	519	Like
425	Sarita Arolar	Basic	520	Comment

20 rows in set (0.001 sec)

```
MariaDB [MeloTunes]> Select Users.user_id, Users.username, Users.Subscription_Status,
-> Interaction.interaction_id, Interaction.interaction_type from Users
-> RIGHT JOIN Interaction ON Users.user_id= Interaction.user_id
-> where Users.Subscription_Status = 'free';
```

user_id	username	Subscription_Status	interaction_id	interaction_type
404	Siddhesh Belalekar	Free	503	Like
421	Sakshi Wagh	Free	505	Share
408	Sakshee Ghag	Free	506	Comment
417	Prathamesh Belalekar	Free	507	Like
408	Sakshee Ghag	Free	510	Comment
424	Sanokshi Sonavane	Free	511	Share
404	Siddhesh Belalekar	Free	512	Like

7 rows in set (0.005 sec)

4) Display a list of all artists along with their albums, including artists who haven't released any albums.(FullJoin)

Syntax: Select Artists.artist_id, Artists.artist_name, Albums.albums_id, Albums.albums_title from Artists LEFT JOIN Albums ON Artists.artist_id = Albums.artist_id

Union

Select Artists.artist_id, Artists.artist_name, Albums.albums_id, Albums.albums_title from Artists RIGHT JOIN Albums ON Artists.artist_id = Albums.artist_id
where Artists.artist_id is NULL;

```
MariaDB [MeloTunes]> Select Artists.artist_id, Artists.artist_name, Albums.albums_id, Albums.albums_title
-> from Artists
-> LEFT JOIN Albums ON Artists.artist_id = Albums.artist_id
-> Union
-> Select Artists.artist_id, Artists.artist_name, Albums.albums_id, Albums.albums_title
-> from Artists
-> RIGHT JOIN Albums ON Artists.artist_id = Albums.artist_id
-> where Artists.artist_id is NULL;
```

artist_id	artist_name	albums_id	albums_title
101	Shawn Mendes	204	Wonder
101	Shawn Mendes	211	Illuminate
102	Charlie Puth	210	Charlie
102	Charlie Puth	224	Voicenotes
103	Harry Styles	202	Harrys House
103	Harry Styles	215	Fine Line
104	Arjit Singh	NULL	NULL
105	Armaan Malik	207	Arman Malik
106	ED Sheeran	218	Divide
107	Lewis Capaldi	209	Before You Go
108	Nail Horan	NULL	NULL
109	Justin Bieber	221	Justice
109	Justin Bieber	225	Purpose
110	A.R Rahman	203	Tamasha
110	A.R Rahman	217	Rokstar
111	Taylor Swift	206	Lover
111	Taylor Swift	216	MidNight
111	Taylor Swift	220	Red
112	Dua Lipa	212	Future Nostalgia
113	John Legend	208	Love in the Future
114	Darshan Rawal	NULL	NULL
115	Camila Cabello	214	Romance
116	Selena Gomez	223	Rare
117	The Weekend	219	Starboy
118	Adele	205	21
119	Amit Trivedi	213	Dear Zindagi
119	Amit Trivedi	222	Ek Main Aur Ekk Tu
120	Zayn	201	Nobody is Listening

28 rows in set (0.001 sec)