

## 1.) WHERE

1	Tum Hi Ho	00:04:22	1	1
2	Kal Ho Naa Ho	00:05:21	2	2
3	Tujh Mein Rab Dikhta Hai	00:04:45	3	1
4	Channa Mereya	00:04:49	4	1
5	Kabira	00:04:10	5	1
6	Pehla Nasha	00:04:55	6	3
7	Agar Tum Saath Ho	00:05:41	7	4
9	Dil Diyan Gallan	00:04:20	9	5
11	Sun Saathiya	00:04:13	11	7
12	Manwa Laage	00:04:34	12	1
14	Deewani Mastani	00:05:30	14	1
15	Moh Moh Ke Dhaage	00:05:00	15	8
16	Pal Pal Har Pal	00:05:14	16	9
17	Barso Re	00:05:28	17	1
18	Sunn Raha Hai	00:06:30	1	1
19	Khuda Jaane	00:05:41	2	1
20	Piya O Re Piya	00:04:25	18	4
21	Zoobi Doobi	00:04:16	19	1
22	Agar Tum Mil Jao	00:05:58	20	1
23	Bairi Piya	00:06:10	21	1
24	Dola Re Dola	00:06:33	21	1
26	Teri Meri	00:05:40	23	1
27	Nagada Sang Dhol	00:04:58	24	1
28	Chikni Chameli	00:05:03	25	1
30	Silsila Ye Chahat Ka	00:06:27	27	1
31	Mujhe Neend Na Aaye	00:05:27	28	10
32	Mera Dil Bhi Kitna Pagal Hai	00:05:10	29	10
33	Tum Mile	00:05:00	30	11
36	Dheere Dheere Se	00:05:23	33	10
37	Jeene Laga Hoon	00:04:25	34	6
38	Phir Bhi Tumko Chaahunga	00:05:50	35	11
39	Hasi Ban Gaye	00:04:19	36	11
40	Tum Jo Aaye	00:05:41	37	4
41	Janam Janam	00:04:15	38	1
42	Gerua	00:05:46	38	1
46	Raabta	00:04:43	41	4
47	Ghungroo	00:05:04	42	1
49	Kabhi Jo Baadal Barse	00:04:30	43	4
50	Sanam Re	00:04:12	44	11

mysql> SELECT * FROM Songs WHERE duration > '00:04:00';				
song_id	title	duration	album_id	artist_id
1	Tum Hi Ho	00:04:22	1	1
2	Kal Ho Naa Ho	00:05:21	2	2
3	Tujh Mein Rab Dikhta Hai	00:04:45	3	1
4	Channa Mereya	00:04:49	4	1
5	Kabira	00:04:10	5	1
6	Pehla Nasha	00:04:55	6	3
7	Agar Tum Saath Ho	00:05:41	7	4
9	Dil Diyan Gallan	00:04:20	9	5
11	Sun Saathiya	00:04:13	11	7
12	Manwa Laage	00:04:34	12	1
14	Deewani Mastani	00:05:30	14	1
15	Moh Moh Ke Dhaage	00:05:00	15	8
16	Pal Pal Har Pal	00:05:14	16	9
17	Barso Re	00:05:28	17	1
18	Sunn Raha Hai	00:06:30	1	1
19	Khuda Jaane	00:05:41	2	1
20	Piya O Re Piya	00:04:25	18	4
21	Zoobi Doobi	00:04:16	19	1
22	Agar Tum Mil Jao	00:05:58	20	1
23	Bairi Piya	00:06:10	21	1
24	Dola Re Dola	00:06:33	21	1
26	Teri Meri	00:05:40	23	1
27	Nagada Sang Dhol	00:04:58	24	1
28	Chikni Chameli	00:05:03	25	1
30	Silsila Ye Chahat Ka	00:06:27	27	1
31	Mujhe Neend Na Aaye	00:05:27	28	10
32	Mera Dil Bhi Kitna Pagal Hai	00:05:10	29	10
33	Tum Mile	00:05:00	30	11
36	Dheere Dheere Se	00:05:23	33	10
37	Jeene Laga Hoon	00:04:25	34	6
38	Phir Bhi Tumko Chaahunga	00:05:50	35	11
39	Hasi Ban Gaye	00:04:19	36	11
40	Tum Jo Aaye	00:05:41	37	4
41	Janam Janam	00:04:15	38	1
42	Gerua	00:05:46	38	1
46	Raabta	00:04:43	41	4

## 2.) ORDER BY

36	Hamari Adhuri Kahani	2015-06-12	11
15	Dum Laga Ke Haisha	2015-02-27	8
26	PK	2014-12-19	1
12	Happy New Year	2014-10-24	1
49	Ek Villain	2014-06-27	11
45	2 States	2014-04-18	1
43	Jackpot	2013-12-13	4
24	Goliyon Ki Raasleela Ram-Leela	2013-11-15	1
13	Lootera	2013-07-05	8
5	Yeh Jawaani Hai Deewani	2013-05-31	1
1	Aashiqui 2	2013-04-26	1
8	Nautanki Saala!	2013-04-12	5
50	Race 2	2013-01-25	11
22	Student of the Year	2012-10-19	1
32	Rowdy Rathore	2012-06-01	11
34	Housefull 2	2012-04-05	11
18	Tere Naal Love Ho Gaya	2012-02-24	4
25	Agneepath	2012-01-26	1
46	The Dirty Picture	2011-12-02	1
48	Rockstar	2011-11-11	2
23	Bodyguard	2011-08-31	1
19	3 Idiots	2009-12-25	1
3	Rab Ne Bana Di Jodi	2008-12-12	1
37	Welcome	2007-12-21	4
17	Guru	2007-01-12	1
16	Lage Raho Munna Bhai	2006-09-01	9
20	Zeher	2005-03-25	1
40	Mujhse Shaadi Karogi	2004-07-30	3
2	Kal Ho Naa Ho	2003-11-27	2
30	Jism	2003-01-17	4
21	Devdas	2002-07-12	1
47	Asoka	2001-10-26	1
39	Dil Chahta Hai	2001-08-10	2
38	Dil Se	1998-08-21	2
27	Aaina	1993-06-18	1
6	Jo Jeeta Wohi Sikandar	1992-05-22	3
28	Saajan	1991-08-30	10
29	Dil	1990-06-22	10

album_id	title	release_date	artist_id
42	War	2019-10-02	1
31	Kabir Singh	2019-06-21	11
9	Tiger Zinda Hai	2017-12-22	5
41	Raabta	2017-06-09	4
35	Half Girlfriend	2017-05-19	11
4	Ae Dil Hai Mushkil	2016-10-28	1
10	M.S. Dhoni: The Untold Story	2016-09-30	6
44	Sanam Re	2016-02-12	11
14	Bajirao Mastani	2015-12-18	1
33	Dilwale	2015-12-18	1
7	Tamasha	2015-11-27	4
11	ABCD 2	2015-06-19	7
36	Hamari Adhuri Kahani	2015-06-12	11
15	Dum Laga Ke Haisha	2015-02-27	8
26	PK	2014-12-19	1
12	Happy New Year	2014-10-24	1
49	Ek Villain	2014-06-27	11
45	2 States	2014-04-18	1
43	Jackpot	2013-12-13	4
24	Goliyon Ki Raasleela Ram-Leela	2013-11-15	1
13	Lootera	2013-07-05	8
5	Yeh Jawaani Hai Deewani	2013-05-31	1
1	Aashiqui 2	2013-04-26	1
8	Nautanki Saala!	2013-04-12	5
50	Race 2	2013-01-25	11
22	Student of the Year	2012-10-19	1
32	Rowdy Rathore	2012-06-01	11
34	Housefull 2	2012-04-05	11
18	Tere Naal Love Ho Gaya	2012-02-24	4
25	Agneepath	2012-01-26	1
46	The Dirty Picture	2011-12-02	1
48	Rockstar	2011-11-11	2
23	Bodyguard	2011-08-31	1
19	3 Idiots	2009-12-25	1
3	Rab Ne Bana Di Jodi	2008-12-12	1
37	Welcome	2007-12-21	4
17	Guru	2007-01-12	1
16	Lage Raho Munna Bhai	2006-09-01	9
20	Zeher	2005-03-25	1

### 3.) COUNT & GROUP BY

```
mysql> SELECT artist_id, COUNT(*) AS total_songs FROM Songs GROUP BY artist_id;
+-----+-----+
| artist_id | total_songs |
+-----+-----+
|      1    |      22   |
|      2    |       1   |
|      3    |       2   |
|      4    |       6   |
|      5    |       2   |
|      6    |       3   |
|      7    |       1   |
|      8    |       2   |
|      9    |       1   |
|     10   |       3   |
|     11   |       7   |
+-----+-----+
11 rows in set (0.03 sec)
```

### 4.) HAVING

```
mysql> SELECT artist_id, COUNT(*) AS total_songs FROM Songs GROUP BY artist_id HAVING COUNT(*) > 3;
+-----+-----+
| artist_id | total_songs |
+-----+-----+
|      1    |      22   |
|      4    |       6   |
|     11   |       7   |
+-----+-----+
3 rows in set (0.00 sec)
```

### 5.) INNER JOIN

```
mysql> SELECT Songs.title, Albums.title AS album_title
    -> FROM Songs
    -> JOIN Albums ON Songs.album_id = Albums.album_id;
```

Moh Moh Ke Dhaage	Dum Laga Ke Haisha
Pal Pal Har Pal	Lage Raho Munna Bhai
Barso Re	Guru
Sunn Raha Hai	Aashiqui 2
Khuda Jaane	Kal Ho Naa Ho
Piya O Re Piya	Tere Naal Love Ho Gaya
Zoobi Doobi	3 Idiots
Agar Tum Mil Jao	Zeher
Bairi Piya	Devdas
Dola Re Dola	Devdas
Radha	Student of the Year
Teri Meri	Bodyguard
Nagada Sang Dhol	Goliyon Ki Raasleela Ram-Leela
Chikni Chameli	Agneepath
Chaar Kadam	PK
Silsila Ye Chahat Ka	Aaina
Mujhe Neend Na Aaye	Saajan
Mera Dil Bhi Kitna Pagal Hai	Dil
Tum Mile	Jism
Tera Ban Jaunga	Kabir Singh
O Saathi	Rowdy Rathore
Dheere Dheere Se	Dilwale
Jeene Laga Hoon	Housefull 2
Phir Bhi Tumko Chaahunga	Half Girlfriend
Hasi Ban Gaye	Hamari Adhuri Kahani
Tum Jo Aaye	Welcome
Janam Janam	Dil Se
Gerua	Dil Se
Pal	Dil Chahta Hai
Mujhse Shaadi Karogi	Mujhse Shaadi Karogi
Kaun Tujhe	M.S. Dhoni: The Untold Story
Raabta	Raabta
Ghungroo	War
Nashe Si Chadh Gayi	Jackpot
Kabhi Jo Baadal Barse	Jackpot
Sanam Re	Sanam Re

title	album_title
Tum Hi Ho	Aashiqui 2
Kal Ho Naa Ho	Kal Ho Naa Ho
Tujh Mein Rab Dikhta Hai	Rab Ne Bana Di Jodi
Channa Mereya	Ae Dil Hai Mushkil
Kabira	Yeh Jawaani Hai Deewani
Pehla Nasha	Jo Jeeta Wohi Sikandar
Agar Tum Saath Ho	Tamasha
Mera Mann Kehne Laga	Nautanki Saala!
Dil Diyan Gallan	Tiger Zinda Hai
Jab Tak	M.S. Dhoni: The Untold Story
Sun Saathiya	ABCD 2
Manwa Laage	Happy New Year
Sawaar Loon	Lootera
Deewani Mastani	Bajirao Mastani
Moh Moh Ke Dhaage	Dum Laga Ke Haisha
Pal Pal Har Pal	Lage Raho Munna Bhai
Barso Re	Guru
Sunn Raha Hai	Aashiqui 2
Khuda Jaane	Kal Ho Naa Ho
Piya O Re Piya	Tere Naal Love Ho Gaya
Zoobi Doobi	3 Idiots
Agar Tum Mil Jao	Zeher
Bairi Piya	Devdas
Dola Re Dola	Devdas
Radha	Student of the Year
Teri Meri	Bodyguard
Nagada Sang Dhol	Goliyon Ki Raasleela Ram-Leela
Chikni Chameli	Agneepath
Chaar Kadam	PK
Silsila Ye Chahat Ka	Aaina
Mujhe Neend Na Aaye	Saajan
Mera Dil Bhi Kitna Pagal Hai	Dil
Tum Mile	Jism
Tera Ban Jaunga	Kabir Singh
O Saathi	Rowdy Rathore
Dheere Dheere Se	Dilwale
Jeene Laga Hoon	Housefull 2
Phir Bhi Tumko Chaahunga	Half Girlfriend

## 6.) LEFT JOIN

```
mysql> SELECT Playlists.name, Songs.title
-> FROM Playlist_Songs
-> LEFT JOIN Songs ON Playlist_Songs.song_id = Songs.song_id
-> LEFT JOIN Playlists ON Playlist_Songs.playlist_id = Playlists.playlist_id;
```

Party Anthems	Deewani Mastani
Party Anthems	Moh Moh Ke Dhaage
Calm Vibes	Pal Pal Har Pal
Calm Vibes	Barso Re
Calm Vibes	Sunn Raha Hai
Golden Oldies	Khuda Jaane
Golden Oldies	Piya O Re Piya
Golden Oldies	Zoobi Doobi
Top 40 Hits	Agar Tum Mil Jao
Top 40 Hits	Bairi Piya
Top 40 Hits	Dola Re Dola
90s Bollywood	Radha
90s Bollywood	Teri Meri
90s Bollywood	Nagada Sang Dhol
Indie Mix	Chikni Chameli
Indie Mix	Chaar Kadam
Indie Mix	Silsila Ye Chahat Ka
Feel Good	Mujhe Neend Na Aaye
Feel Good	Mera Dil Bhi Kitna Pagal Hai
Feel Good	Tum Mile
Dancefloor Hits	Tera Ban Jaunga
Dancefloor Hits	O Saathi
Dancefloor Hits	Dheere Dheere Se
Soulful Melodies	Jeene Laga Hoon
Soulful Melodies	Phir Bhi Tumko Chaahunga
Soulful Melodies	Hasi Ban Gaye
Festival Hits	Tum Jo Aaye
Festival Hits	Janam Janam
Festival Hits	Gerua
Pop Classics	Pal
Pop Classics	Mujhse Shaadi Karogi
Pop Classics	Kaun Tujhe
Road Trippin	Raabta
Road Trippin	Ghungroo
Road Trippin	Nashe Si Chadh Gayi
Soft Rock	Kabhi Jo Baadal Barse
Soft Rock	Sanam Re

+-----+-----+

51 rows in set (0.01 sec)

name	title
Bollywood Hits	Tum Hi Ho
Soft Rock	Tum Hi Ho
Bollywood Hits	Kal Ho Naa Ho
Bollywood Hits	Tujh Mein Rab Dikhta Hai
Romantic Songs	Channa Mereya
Romantic Songs	Kabira
Romantic Songs	Pehla Nasha
Workout Jams	Agar Tum Saath Ho
Workout Jams	Mera Mann Kehne Laga
Workout Jams	Dil Diyan Gallan
Road Trip	Jab Tak
Road Trip	Sun Saathiya
Road Trip	Manwa Laage
Party Anthems	Sawaar Loon
Party Anthems	Deewani Mastani
Party Anthems	Moh Moh Ke Dhaage
Calm Vibes	Pal Pal Har Pal
Calm Vibes	Barso Re
Calm Vibes	Sunn Raha Hai
Golden Oldies	Khuda Jaane
Golden Oldies	Piya O Re Piya
Golden Oldies	Zoobi Doobi
Top 40 Hits	Agar Tum Mil Jao
Top 40 Hits	Bairi Piya
Top 40 Hits	Dola Re Dola
90s Bollywood	Radha
90s Bollywood	Teri Meri
90s Bollywood	Nagada Sang Dhol
Indie Mix	Chikni Chameli
Indie Mix	Chaar Kadam
Indie Mix	Silsila Ye Chahat Ka
Feel Good	Mujhe Neend Na Aaye
Feel Good	Mera Dil Bhi Kitna Pagal Hai
Feel Good	Tum Mile
Dancefloor Hits	Tera Ban Jaunga
Dancefloor Hits	O Saathi
Dancefloor Hits	Dheere Dheere Se

## 7.) RIGHT JOIN

```
mysql> SELECT Venues.name, Concerts.concert_date  
-> FROM Venues  
-> RIGHT JOIN Concerts ON Venues.venue_id = Concerts.venue_id;  
. . .
```

Pragati Maidan	2025-02-05
Chowdiah Memorial Hall	2025-02-10
Sirifort Auditorium	2025-02-15
Mahalakshmi Race Course	2025-02-20
Indira Gandhi Pratishthan	2025-03-01
Pyramid Valley International	2025-03-10
Jawaharlal Nehru Stadium	2025-03-15
Kala Academy	2025-03-20
Nandan Auditorium	2025-03-25
Bharatiya Vidya Bhavan	2025-04-05
Rajiv Gandhi Indoor Stadium	2025-04-10
Sri Sathya Sai Auditorium	2025-04-15
Gandhi Maidan	2025-04-20
Rajpath Club	2025-04-25
Kingdom of Dreams	2025-05-01
Biswa Bangla Convention Centre	2025-05-10
Eco Park	2025-05-15
Lucknow Stadium	2025-05-20
Birla Auditorium	2025-05-25
Science City Auditorium	2025-06-01
Kanteerava Outdoor Stadium	2025-06-05
Ravindra Bharathi	2025-06-10
Lal Parade Ground	2025-06-15
Bal Bhavan	2025-06-20
Swatantrata Sangram Senani Auditorium	2025-06-25
Nehru Science Centre	2025-07-01
Artillery Centre Ground	2025-07-05
Kala Mandir	2025-07-10
Freedom Park	2025-07-15
Deccan College Grounds	2025-07-20
Kamani Auditorium	2025-07-25
Deshpande Hall	2025-08-01
Shaheed Vijay Singh Pathik Stadium	2025-08-05
Chennai Trade Centre	2025-08-10
Kumarakom Grounds	2025-08-15
The Westin Gardens	2025-08-20
Panchkula Stadium	2025-08-25

name	concert_date
Nehru Indoor Stadium	2024-11-10
JLN Stadium	2024-11-15
Brabourne Stadium	2024-11-20
Sawai Mansingh Stadium	2024-12-05
Indira Gandhi Indoor Stadium	2024-12-10
Shanmukhananda Hall	2024-12-15
Sree Kanteerava Indoor Stadium	2024-12-20
Talkatora Indoor Stadium	2024-12-25
Balewadi Stadium	2025-01-01
Phoenix Marketcity Amphitheatre	2025-01-05
Sardar Vallabhbhai Patel Indoor Stadium	2025-01-10
Kolkata Town Hall	2025-01-15
Yashwantrao Chavan Auditorium	2025-01-20
Pragati Maidan	2025-02-05
Chowdiah Memorial Hall	2025-02-10
Sirifort Auditorium	2025-02-15
Mahalakshmi Race Course	2025-02-20
Indira Gandhi Pratishthan	2025-03-01
Pyramid Valley International	2025-03-10
Jawaharlal Nehru Stadium	2025-03-15
Kala Academy	2025-03-20
Nandan Auditorium	2025-03-25
Bharatiya Vidya Bhavan	2025-04-05
Rajiv Gandhi Indoor Stadium	2025-04-10
Sri Sathya Sai Auditorium	2025-04-15
Gandhi Maidan	2025-04-20
Rajpath Club	2025-04-25
Kingdom of Dreams	2025-05-01
Biswa Bangla Convention Centre	2025-05-10
Eco Park	2025-05-15
Lucknow Stadium	2025-05-20
Birla Auditorium	2025-05-25
Science City Auditorium	2025-06-01
Kanteerava Outdoor Stadium	2025-06-05
Ravindra Bharathi	2025-06-10
Lal Parade Ground	2025-06-15
Bal Bhavan	2025-06-20
Swatantrata Sangram Senani Auditorium	2025-06-25

## 8.) SUBQUERY

```
mysql> SELECT title FROM Albums WHERE album_id = (SELECT album_id FROM Songs WHERE title = 'Tum Hi Ho');
+-----+
| title |
+-----+
| Aashiqui 2 |
+-----+
1 row in set (0.04 sec)
```

## 9.) EXIST CLAUSE

```
mysql> SELECT * FROM Users WHERE EXISTS (SELECT * FROM User_Song_History WHERE user_id = Users.user_id);
+-----+-----+-----+-----+
| user_id | username | email | created_at |
+-----+-----+-----+-----+
| 1 | user_amit | amit@example.com | 2024-11-10 02:41:58 |
| 2 | user_neha | neha@example.com | 2024-11-10 02:41:58 |
| 3 | user_rahul | rahul@example.com | 2024-11-10 02:41:58 |
| 4 | user_riya | riya@example.com | 2024-11-10 02:41:58 |
| 5 | user_sahil | sahil@example.com | 2024-11-10 02:41:58 |
| 6 | user_preeti | preeti@example.com | 2024-11-10 02:41:58 |
| 7 | user_manoj | manoj@example.com | 2024-11-10 02:41:58 |
| 8 | user_shweta | shweta@example.com | 2024-11-10 02:41:58 |
| 9 | user_varun | varun@example.com | 2024-11-10 02:41:58 |
| 10 | user_megha | megha@example.com | 2024-11-10 02:41:58 |
| 11 | user_nikhil | nikhil@example.com | 2024-11-10 02:41:58 |
| 12 | user_priya | priya@example.com | 2024-11-10 02:41:58 |
| 13 | user_vivek | vivek@example.com | 2024-11-10 02:41:58 |
| 14 | user_sneha | sneha@example.com | 2024-11-10 02:41:58 |
| 15 | user_deepak | deepak@example.com | 2024-11-10 02:41:58 |
| 16 | user_anu | anu@example.com | 2024-11-10 02:41:58 |
| 17 | user_rohit | rohit@example.com | 2024-11-10 02:41:58 |
+-----+-----+-----+-----+
17 rows in set (0.01 sec)
```

## 10.) NOT EXIST CLAUSE

```
mysql> SELECT * FROM Playlists WHERE NOT EXISTS (SELECT * FROM Playlist_Songs WHERE playlist_id = Playlists.playlist_id);
+-----+-----+-----+-----+
| playlist_id | name | created_at | user_id |
+-----+-----+-----+-----+
| 18 | Sleepy Time | 2024-11-10 02:41:58 | 18 |
| 19 | Ghazals & More | 2024-11-10 02:41:58 | 19 |
| 20 | Morning Motivation | 2024-11-10 02:41:58 | 20 |
| 21 | Retro Bollywood | 2024-11-10 02:41:58 | 21 |
| 22 | Night Chill | 2024-11-10 02:41:58 | 22 |
| 23 | Love Songs | 2024-11-10 02:41:58 | 23 |
| 24 | Relaxing Tunes | 2024-11-10 02:41:58 | 24 |
| 25 | Best of Arijit Singh | 2024-11-10 02:41:58 | 25 |
| 26 | Energetic Beats | 2024-11-10 02:41:58 | 26 |
| 27 | Focus Music | 2024-11-10 02:41:59 | 27 |
| 28 | Travel Essentials | 2024-11-10 02:41:59 | 28 |
| 29 | Bollywood Party | 2024-11-10 02:41:59 | 29 |
| 30 | Hindi Retro | 2024-11-10 02:41:59 | 30 |
| 31 | Desi Pop | 2024-11-10 02:41:59 | 31 |
| 32 | Rainy Day | 2024-11-10 02:41:59 | 32 |
| 33 | Top Love Songs | 2024-11-10 02:41:59 | 33 |
| 34 | Dance Bollywood | 2024-11-10 02:41:59 | 34 |
| 35 | Classical Fusion | 2024-11-10 02:41:59 | 35 |
| 36 | Relax & Unwind | 2024-11-10 02:41:59 | 36 |
| 37 | Bollywood Rock | 2024-11-10 02:41:59 | 37 |
| 38 | Summer Vibes | 2024-11-10 02:41:59 | 38 |
| 39 | Mashups & Remixes | 2024-11-10 02:41:59 | 39 |
| 40 | Bollywood Legends | 2024-11-10 02:41:59 | 40 |
| 41 | Rock Classics | 2024-11-10 02:41:59 | 41 |
| 42 | Motivation Mix | 2024-11-10 02:41:59 | 42 |
| 43 | Pure Romance | 2024-11-10 02:41:59 | 43 |
| 44 | Peaceful Nights | 2024-11-10 02:41:59 | 44 |
| 45 | Punjabi Hits | 2024-11-10 02:41:59 | 45 |
| 46 | Morning Workout | 2024-11-10 02:41:59 | 46 |
| 47 | Road Trip 2024 | 2024-11-10 02:41:59 | 47 |
| 48 | Shreya Ghoshal Hits | 2024-11-10 02:41:59 | 48 |
| 49 | Heartbreak Songs | 2024-11-10 02:41:59 | 49 |
| 50 | Classics Revived | 2024-11-10 02:41:59 | 50 |
+-----+-----+-----+-----+
33 rows in set (0.02 sec)
```

## 11.) IN CLAUSE

```
mysql> SELECT * FROM Users WHERE user_id IN (SELECT user_id FROM User_Song_History);
+-----+-----+-----+-----+
| user_id | username | email | created_at |
+-----+-----+-----+-----+
| 1 | user_amit | amit@example.com | 2024-11-10 02:41:58 |
| 2 | user_neha | neha@example.com | 2024-11-10 02:41:58 |
| 3 | user_rahul | rahul@example.com | 2024-11-10 02:41:58 |
| 4 | user_riya | riya@example.com | 2024-11-10 02:41:58 |
| 5 | user_sahil | sahil@example.com | 2024-11-10 02:41:58 |
| 6 | user_preeti | preeti@example.com | 2024-11-10 02:41:58 |
| 7 | user_manoj | manoj@example.com | 2024-11-10 02:41:58 |
| 8 | user_shweta | shweta@example.com | 2024-11-10 02:41:58 |
| 9 | user_varun | varun@example.com | 2024-11-10 02:41:58 |
| 10 | user_megha | megha@example.com | 2024-11-10 02:41:58 |
| 11 | user_nikhil | nikhil@example.com | 2024-11-10 02:41:58 |
| 12 | user_priya | priya@example.com | 2024-11-10 02:41:58 |
| 13 | user_vivek | vivek@example.com | 2024-11-10 02:41:58 |
| 14 | user_sneha | sneha@example.com | 2024-11-10 02:41:58 |
| 15 | user_deepak | deepak@example.com | 2024-11-10 02:41:58 |
| 16 | user_anu | anu@example.com | 2024-11-10 02:41:58 |
| 17 | user_rohit | rohit@example.com | 2024-11-10 02:41:58 |
+-----+-----+-----+-----+
```

## 12.) BETWEEN CLAUSE

```
mysql> SELECT * FROM Concerts WHERE concert_date BETWEEN '2024-01-01' AND '2024-12-31';
+-----+-----+-----+-----+-----+-----+-----+-----+
| concert_id | artist_id | artist_name | venue_id | concert_date | start_time | end_time | ticket_price |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | 1 | Arijit Singh | 1 | 2024-11-10 | 18:00:00 | 20:00:00 | 1500.00 |
| 2 | 2 | Shreya Ghoshal | 2 | 2024-11-15 | 19:30:00 | 22:00:00 | 2500.00 |
| 3 | 3 | Monali Thakur | 3 | 2024-11-20 | 17:00:00 | 19:00:00 | 1200.00 |
| 4 | 4 | Atif Aslam | 4 | 2024-12-05 | 18:30:00 | 21:00:00 | 3000.00 |
| 5 | 5 | Alka Yagnik | 5 | 2024-12-10 | 19:00:00 | 22:00:00 | 1800.00 |
| 6 | 1 | Arijit Singh | 6 | 2024-12-15 | 20:00:00 | 23:00:00 | 2000.00 |
| 7 | 2 | Shreya Ghoshal | 7 | 2024-12-20 | 19:00:00 | 21:30:00 | 1600.00 |
| 8 | 3 | Monali Thakur | 8 | 2024-12-25 | 17:30:00 | 20:00:00 | 1300.00 |
+-----+-----+-----+-----+-----+-----+-----+-----+
8 rows in set (0.01 sec)
```

## 13.) AGGREGATE FUNCTION COUNT

```
mysql> SELECT COUNT(*) AS total_users FROM Users;
+-----+
| total_users |
+-----+
|      50     |
+-----+
1 row in set (0.00 sec)
```

## 14.) AGGREGATE FUNCTION SUM

```
mysql> SELECT SUM(ticket_price) AS total_revenue FROM Concerts;
+-----+
| total_revenue |
+-----+
|      107750.00 |
+-----+
1 row in set (0.01 sec)
```

## 15.) AVERAGE

```
mysql> SELECT AVG(duration_played) AS avg_duration FROM User_Song_History;
+-----+
| avg_duration |
+-----+
|      203.8000 |
+-----+
1 row in set (0.00 sec)
```

## 16.) MAX

```
mysql> SELECT MAX(release_date) AS latest_album FROM Albums;
+-----+
| latest_album |
+-----+
| 2019-10-02   |
+-----+
1 row in set (0.00 sec)
```

## 17.) MIN

```
mysql> SELECT MIN(duration) AS shortest_song FROM Songs;
+-----+
| shortest_song |
+-----+
| 00:03:30     |
+-----+
1 row in set (0.00 sec)
```

## 18.) UPDATE

```
mysql> UPDATE User_preferences SET dark_mode = TRUE WHERE user_id = 1;
Query OK, 1 row affected (0.04 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select dark_mode from user_preferences where user_id=1;
+-----+
| dark_mode |
+-----+
|      1   |
+-----+
1 row in set (0.00 sec)
```

## 19.) DELETE

```
mysql> DELETE FROM Playlist_Songs WHERE playlist_id = 2 AND song_id = 5;
Query OK, 1 row affected (0.01 sec)
```

## 20.) INSERT

```
mysql> INSERT INTO Genres (genre_id, name) VALUES (51, 'Pop');
Query OK, 1 row affected (0.01 sec)

mysql> select * from genres where genre_id=51;
+-----+-----+
| genre_id | name  |
+-----+-----+
|      51  | Pop   |
+-----+-----+
1 row in set (0.00 sec)
```

## 21.) FULL OUTER JOIN

```
mysql> SELECT Venues.name, Concerts.concert_date  
-> FROM Venues  
-> LEFT JOIN Concerts ON Venues.venue_id = Concerts.venue_id  
-> UNION  
-> SELECT Venues.name, Concerts.concert_date  
-> FROM Venues  
-> RIGHT JOIN Concerts ON Venues.venue_id = Concerts.venue_id;
```

Piagati Maidan	2025-02-05
Chowdiah Memorial Hall	2025-02-10
Sirifort Auditorium	2025-02-15
Mahalakshmi Race Course	2025-02-20
Indira Gandhi Pratishthan	2025-03-01
Pyramid Valley International	2025-03-10
Jawaharlal Nehru Stadium	2025-03-15
Kala Academy	2025-03-20
Nandan Auditorium	2025-03-25
Bharatiya Vidya Bhavan	2025-04-05
Rajiv Gandhi Indoor Stadium	2025-04-10
Sri Sathya Sai Auditorium	2025-04-15
Gandhi Maidan	2025-04-20
Rajpath Club	2025-04-25
Kingdom of Dreams	2025-05-01
Biswa Bangla Convention Centre	2025-05-10
Eco Park	2025-05-15
Lucknow Stadium	2025-05-20
Birla Auditorium	2025-05-25
Science City Auditorium	2025-06-01
Kanteerava Outdoor Stadium	2025-06-05
Ravindra Bharathi	2025-06-10
Lal Parade Ground	2025-06-15
Bal Bhavan	2025-06-20
Swatantrata Sangram Senani Auditorium	2025-06-25
Nehru Science Centre	2025-07-01
Artillery Centre Ground	2025-07-05
Kala Mandir	2025-07-10
Freedom Park	2025-07-15
Deccan College Grounds	2025-07-20
Kamani Auditorium	2025-07-25
Deshpande Hall	2025-08-01
Shaheed Vijay Singh Pathik Stadium	2025-08-05
Chennai Trade Centre	2025-08-10
Kumarakom Grounds	2025-08-15
The Westin Gardens	2025-08-20
Panchkula Stadium	2025-08-25

+-----+-----+

50 rows in set (0.03 sec)

name	concert_date
Nehru Indoor Stadium	2024-11-10
JLN Stadium	2024-11-15
Brabourne Stadium	2024-11-20
Sawai Mansingh Stadium	2024-12-05
Indira Gandhi Indoor Stadium	2024-12-10
Shanmukhananda Hall	2024-12-15
Sree Kanteerava Indoor Stadium	2024-12-20
Talkatora Indoor Stadium	2024-12-25
Balewadi Stadium	2025-01-01
Phoenix Marketcity Amphitheatre	2025-01-05
Sardar Vallabhbhai Patel Indoor Stadium	2025-01-10
Kolkata Town Hall	2025-01-15
Yashwantrao Chavan Auditorium	2025-01-20
Pragati Maidan	2025-02-05
Chowdiah Memorial Hall	2025-02-10
Sirifort Auditorium	2025-02-15
Mahalakshmi Race Course	2025-02-20
Indira Gandhi Pratishthan	2025-03-01
Pyramid Valley International	2025-03-10
Jawaharlal Nehru Stadium	2025-03-15
Kala Academy	2025-03-20
Nandan Auditorium	2025-03-25
Bharatiya Vidya Bhavan	2025-04-05
Rajiv Gandhi Indoor Stadium	2025-04-10
Sri Sathya Sai Auditorium	2025-04-15
Gandhi Maidan	2025-04-20
Rajpath Club	2025-04-25
Kingdom of Dreams	2025-05-01
Biswa Bangla Convention Centre	2025-05-10
Eco Park	2025-05-15
Lucknow Stadium	2025-05-20
Birla Auditorium	2025-05-25
Science City Auditorium	2025-06-01
Kanteerava Outdoor Stadium	2025-06-05
Ravindra Bharathi	2025-06-10
Lal Parade Ground	2025-06-15
Bal Bhavan	2025-06-20
Swatantrata Sangram Senani Auditorium	2025-06-25

## 22.) UNION

```
mysql> SELECT title AS name FROM Songs
-> UNION
-> Select name from Playlists;
```

name
Tum Hi Ho
Kal Ho Naa Ho
Tujh Mein Rab Dikhta Hai
Channa Mereya
Kabira
Pehla Nasha
Agar Tum Saath Ho
Mera Mann Kehne Laga
Dil Diyan Gallan
Jab Tak
Sun Saathiya
Manwa Laage
Sawaar Loon
Deewani Mastani
Moh Moh Ke Dhaage
Pal Pal Har Pal
Barso Re
Sunn Raha Hai
Khuda Jaane
Piya O Re Piya
Zoobi Doobi
Agar Tum Mil Jao
Bairi Piya
Dola Re Dola
Radha
Teri Meri
Nagada Sang Dhol
Chikni Chameli
Chaar Kadam
Silsila Ye Chahat Ka

## 23.) DISTINCT

```
mysql> SELECT DISTINCT preferred_genre FROM User_Preferences;
+-----+
| preferred_genre |
+-----+
| Pop           |
| Classical    |
| Rock          |
| Hip Hop       |
| Jazz          |
| Bollywood    |
| EDM           |
| Folk          |
| Retro          |
+-----+
9 rows in set (0.00 sec)
```

## 24.) CASE STATEMENT

```

mysql> SELECT user_id,
->           CASE
->             WHEN notifications_enabled = TRUE THEN 'Notifications On'
->             ELSE 'Notifications Off'
->           END AS notification_status
->     FROM User_Preferences;
+-----+-----+
| user_id | notification_status |
+-----+-----+
|      1 | Notifications On
|      2 | Notifications On
|      3 | Notifications Off
|      4 | Notifications On
|      5 | Notifications Off
|      6 | Notifications On
|      7 | Notifications On
|      8 | Notifications Off
|      9 | Notifications On
|     10 | Notifications Off
|     11 | Notifications On
|     12 | Notifications Off
|     13 | Notifications On
|     14 | Notifications Off
|     15 | Notifications On
|     16 | Notifications On
|     17 | Notifications Off
|     18 | Notifications On
|     19 | Notifications Off
|     20 | Notifications On
|     21 | Notifications Off
|     22 | Notifications On
|     23 | Notifications Off
|     24 | Notifications On
|     25 | Notifications On
|     26 | Notifications Off
|     27 | Notifications On
|     28 | Notifications Off
|     29 | Notifications On

```

## 25.) LIKE CLAUSE

```

mysql> SELECT * FROM Songs WHERE title LIKE 'T%';
+-----+-----+-----+-----+
| song_id | title          | duration | album_id | artist_id |
+-----+-----+-----+-----+
|      1 | Tum Hi Ho       | 00:04:22 |      1 |      1 |
|      3 | Tujh Mein Rab Dikhta Hai | 00:04:45 |      3 |      1 |
|     26 | Teri Meri       | 00:05:40 |     23 |      1 |
|     33 | Tum Mile        | 00:05:00 |     30 |     11 |
|     34 | Tera Ban Jaunga | 00:03:57 |     31 |     11 |
|     40 | Tum Jo Aaye     | 00:05:41 |     37 |      4 |
+-----+-----+-----+-----+
6 rows in set (0.02 sec)

```

## 26.) INNER JOIN WITH MULTIPLE TABLES

```

mysql> SELECT Users.username, Songs.title, User_Song_History.played_at
-> FROM User_Song_History
-> INNER JOIN Users ON User_Song_History.user_id = Users.user_id
-> INNER JOIN Songs ON User_Song_History.song_id = Songs.song_id;
+-----+-----+-----+
| username | title | played_at |
+-----+-----+-----+
| user_amit | Tum Hi Ho | 2024-01-01 10:00:00 |
| user_amit | Kal Ho Naa Ho | 2024-01-01 10:05:00 |
| user_amit | Tujh Mein Rab Dikhta Hai | 2024-01-01 10:10:00 |
| user_neha | Channa Mereya | 2024-01-02 11:00:00 |
| user_neha | Kabira | 2024-01-02 11:05:00 |
| user_neha | Pehla Nasha | 2024-01-02 11:10:00 |
| user_rahul | Agar Tum Saath Ho | 2024-01-03 12:00:00 |
| user_rahul | Mera Mann Kehne Laga | 2024-01-03 12:05:00 |
| user_rahul | Dil Diyan Gallan | 2024-01-03 12:10:00 |
| user_riya | Jab Tak | 2024-01-04 13:00:00 |
| user_riya | Sun Saathiya | 2024-01-04 13:05:00 |
| user_riya | Manwa Laage | 2024-01-04 13:10:00 |
| user_sahil | Sawaar Loon | 2024-01-05 14:00:00 |
| user_sahil | Deewani Mastani | 2024-01-05 14:05:00 |
| user_sahil | Moh Moh Ke Dhaage | 2024-01-05 14:10:00 |
| user_preeti | Pal Pal Har Pal | 2024-01-06 15:00:00 |
| user_preeti | Barso Re | 2024-01-06 15:05:00 |
| user_preeti | Sunn Raha Hai | 2024-01-06 15:10:00 |
| user_manoj | Khuda Jaane | 2024-01-07 16:00:00 |
| user_manoj | Piya O Re Piya | 2024-01-07 16:05:00 |
| user_manoj | Zoobi Doobi | 2024-01-07 16:10:00 |
| user_shweta | Agar Tum Mil Jao | 2024-01-08 17:00:00 |
| user_shweta | Bairi Piya | 2024-01-08 17:05:00 |
| user_shweta | Dola Re Dola | 2024-01-08 17:10:00 |
| user_varun | Radha | 2024-01-09 18:00:00 |
| user_varun | Teri Meri | 2024-01-09 18:05:00 |
| user_varun | Nagada Sang Dhol | 2024-01-09 18:10:00 |
| user_megha | Chikni Chameli | 2024-01-10 19:00:00 |
| user_megha | Chaar Kadam | 2024-01-10 19:05:00 |
| user_megha | Silsila Ye Chahat Ka | 2024-01-10 19:10:00 |
| user_nikhil | Mujhe Neend Na Aaye | 2024-01-11 20:00:00 |
| user_nikhil | Mera Dil Bhi Kitna Pagal Hai | 2024-01-11 20:05:00 |
| user_nikhil | Tum Mile | 2024-01-11 20:10:00 |

```

user_sahil	Moh Moh Ke Dhaage	2024-01-05 14:10:00
user_preeti	Pal Pal Har Pal	2024-01-06 15:00:00
user_preeti	Barso Re	2024-01-06 15:05:00
user_preeti	Sunn Raha Hai	2024-01-06 15:10:00
user_manoj	Khuda Jaane	2024-01-07 16:00:00
user_manoj	Piya O Re Piya	2024-01-07 16:05:00
user_manoj	Zoobi Doobi	2024-01-07 16:10:00
user_shweta	Agar Tum Mil Jao	2024-01-08 17:00:00
user_shweta	Bairi Piya	2024-01-08 17:05:00
user_shweta	Dola Re Dola	2024-01-08 17:10:00
user_varun	Radha	2024-01-09 18:00:00
user_varun	Teri Meri	2024-01-09 18:05:00
user_varun	Nagada Sang Dhol	2024-01-09 18:10:00
user_megha	Chikni Chameli	2024-01-10 19:00:00
user_megha	Chaar Kadam	2024-01-10 19:05:00
user_megha	Silsila Ye Chahat Ka	2024-01-10 19:10:00
user_nikhil	Mujhe Neend Na Aaye	2024-01-11 20:00:00
user_nikhil	Mera Dil Bhi Kitna Pagal Hai	2024-01-11 20:05:00
user_nikhil	Tum Mile	2024-01-11 20:10:00
user_priya	Tera Ban Jaunga	2024-01-12 21:00:00
user_priya	O Saathi	2024-01-12 21:05:00
user_priya	Dheere Dheere Se	2024-01-12 21:10:00
user_vivek	Jeene Laga Hoon	2024-01-13 22:00:00
user_vivek	Phir Bhi Tumko Chaahunga	2024-01-13 22:05:00
user_vivek	Hasi Ban Gaye	2024-01-13 22:10:00
user_sneha	Tum Jo Aaye	2024-01-14 23:00:00
user_sneha	Janam Janam	2024-01-14 23:05:00
user_sneha	Gerua	2024-01-14 23:10:00
user_deepak	Pal	2024-01-15 00:00:00
user_deepak	Mujhse Shaadi Karogi	2024-01-15 00:05:00
user_deepak	Kaun Tujhe	2024-01-15 00:10:00
user_anu	Raabta	2024-01-16 01:00:00
user_anu	Ghungroo	2024-01-16 01:05:00
user_anu	Nashe Si Chadh Gayi	2024-01-16 01:10:00
user_rohit	Kabhi Jo Baadal Barse	2024-01-17 02:00:00
user_rohit	Sanam Re	2024-01-17 02:05:00

50 rows in set (0.00 sec)

## 27.) CONDITIONAL AGGREGATION

```
mysql> SELECT user_id, SUM(duration_played) AS total_duration_played
-> FROM User_Song_History
-> GROUP BY user_id;
+-----+-----+
| user_id | total_duration_played |
+-----+-----+
|      1  |          530
|      2  |          720
|      3  |          595
|      4  |          590
|      5  |          610
|      6  |          590
|      7  |          620
|      8  |          575
|      9  |          620
|     10  |          525
|     11  |          675
|     12  |          640
|     13  |          575
|     14  |          670
|     15  |          570
|     16  |          675
|     17  |          410
+-----+-----+
17 rows in set (0.00 sec)
```

## 28.) COALESCE

```
mysql> SELECT COALESCE(preferred_genre, 'Unknown') AS genre FROM User_Preferences;
+-----+
| genre |
+-----+
| Pop   |
| Classical |
| Rock  |
| Hip Hop |
| Jazz   |
| Bollywood |
| EDM   |
| Folk   |
| Retro  |
| Pop   |
| Classical |
| Rock  |
| Hip Hop |
| Jazz   |
| Bollywood |
| EDM   |
| Folk   |
| Retro  |
| Pop   |
| Classical |
| Rock  |
| Hip Hop |
| Jazz   |
| Bollywood |
| EDM   |
| Folk   |
| Retro  |
| Pop   |
| Classical |
| Rock  |
| Hip Hop |
| Jazz   |
| Bollywood |
| EDM   |
| Folk   |
| Retro  |
| Pop   |
| Classical |
| Rock  |
| Hip Hop |
| Jazz   |
| Bollywood |
| EDM   |
| Folk   |
| Retro  |
| Pop   |
```

## 29.) INNER JOIN WITH FILTERING AND ORDER BY

```

mysql> SELECT Users.username, Songs.title, User_Song_History.duration_played
-> FROM User_Song_History
-> INNER JOIN Users ON User_Song_History.user_id = Users.user_id
-> INNER JOIN Songs ON User_Song_History.song_id = Songs.song_id
-> ORDER BY User_Song_History.duration_played DESC;
+-----+-----+-----+
| username | title | duration_played |
+-----+-----+-----+
| user_neha | Kabira | 300 |
| user_neha | Channa Mereya | 240 |
| user_sneha | Tum Jo Aaye | 240 |
| user_manoj | Khuda Jaane | 240 |
| user_nikhil | Tum Mile | 240 |
| user_anu | Nashe Si Chadh Gayi | 240 |
| user_priya | Dheere Dheere Se | 230 |
| user_sahil | Moh Moh Ke Dhaage | 230 |
| user_varun | Teri Meri | 230 |
| user_anu | Ghungroo | 225 |
| user_nikhil | Mera Dil Bhi Kitna Pagal Hai | 225 |
| user_rahul | Mera Mann Kehne Laga | 225 |
| user_sneha | Janam Janam | 220 |
| user_riya | Manwa Laage | 220 |
| user_manoj | Piya O Re Piya | 220 |
| user_rahul | Agar Tum Saath Ho | 210 |
| user_nikhil | Mujhe Neend Na Aaye | 210 |
| user_anu | Raabta | 210 |
| user_sneha | Gerua | 210 |
| user_rohit | Sanam Re | 210 |
| user_varun | Radha | 210 |
| user_preeti | Barso Re | 210 |
| user_priya | O Saathi | 210 |
| user_preeti | Pal Pal Har Pal | 200 |
| user_shweta | Dola Re Dola | 200 |
| user_deepak | Mujhse Shaadi Karogi | 200 |
| user_priya | Tera Ban Jaunga | 200 |
| user_vivek | Hasi Ban Gaye | 200 |
| user_amit | Kal Ho Naa Ho | 200 |
| user_rohit | Kabhi Jo Baadal Barse | 200 |
| user_sahil | Deewani Mastani | 195 |
| user_riya | Jab Tak | 195 |

```

## 30.) VIEW CREATION

```

mysql> CREATE VIEW UserHistoryView AS
-> SELECT Users.username, Songs.title, User_Song_History.played_at
-> FROM User_Song_History
-> JOIN Users ON User_Song_History.user_id = Users.user_id
-> JOIN Songs ON User_Song_History.song_id = Songs.song_id;
Query OK, 0 rows affected (0.05 sec)

```

## 31.) VIEW SELECTION

```
mysql> SELECT * FROM UserHistoryView WHERE played_at > '2024-01-01';
+-----+-----+-----+
| username | title          | played_at   |
+-----+-----+-----+
| user_amit | Tum Hi Ho      | 2024-01-01 10:00:00 |
| user_amit | Kal Ho Naa Ho  | 2024-01-01 10:05:00 |
| user_amit | Tujh Mein Rab Dikhta Hai | 2024-01-01 10:10:00 |
| user_neha  | Channa Mereya  | 2024-01-02 11:00:00 |
| user_neha  | Kabira         | 2024-01-02 11:05:00 |
| user_neha  | Pehla Nasha    | 2024-01-02 11:10:00 |
| user_rahul | Agar Tum Saath Ho | 2024-01-03 12:00:00 |
| user_rahul | Mera Mann Kehne Laga | 2024-01-03 12:05:00 |
| user_rahul | Dil Diyan Gallan | 2024-01-03 12:10:00 |
| user_riya  | Jab Tak        | 2024-01-04 13:00:00 |
| user_riya  | Sun Saathiya  | 2024-01-04 13:05:00 |
| user_riya  | Manwa Laage    | 2024-01-04 13:10:00 |
| user_sahil | Sawaar Loon    | 2024-01-05 14:00:00 |
| user_sahil | Deewani Mastani | 2024-01-05 14:05:00 |
| user_sahil | Moh Moh Ke Dhaage | 2024-01-05 14:10:00 |
| user_preeti | Pal Pal Har Pal | 2024-01-06 15:00:00 |
| user_preeti | Barso Re       | 2024-01-06 15:05:00 |
| user_preeti | Sunn Raha Hai  | 2024-01-06 15:10:00 |
| user_manoj  | Khuda Jaane    | 2024-01-07 16:00:00 |
| user_manoj  | Piya O Re Piya | 2024-01-07 16:05:00 |
| user_manoj  | Zoobi Doobi    | 2024-01-07 16:10:00 |
| user_shweta | Agar Tum Mil Jao | 2024-01-08 17:00:00 |
| user_shweta | Bairi Piya     | 2024-01-08 17:05:00 |
| user_shweta | Dola Re Dola   | 2024-01-08 17:10:00 |
| user_varun  | Radha          | 2024-01-09 18:00:00 |
| user_varun  | Teri Meri      | 2024-01-09 18:05:00 |
| user_varun  | Nagada Sang Dhol | 2024-01-09 18:10:00 |
| user_megha  | Chikni Chameli | 2024-01-10 19:00:00 |
| user_megha  | Chaar Kadam    | 2024-01-10 19:05:00 |
| user_megha  | Silsila Ye Chahat Ka | 2024-01-10 19:10:00 |
| user_nikhil | Mujhe Neend Na Aaye | 2024-01-11 20:00:00 |
| user_nikhil | Mera Dil Bhi Kitna Pagal Hai | 2024-01-11 20:05:00 |
| user_nikhil | Tum Mile        | 2024-01-11 20:10:00 |
| user_priya  | Tera Ban Jaunga | 2024-01-12 21:00:00 |
| user_priya  | O Saathi       | 2024-01-12 21:05:00 |
```

user_sahil	Deewani Mastani	2024-01-05 14:05:00
user_preeti	Moh Moh Ke Dhaage	2024-01-05 14:10:00
user_preeti	Pal Pal Har Pal	2024-01-06 15:00:00
user_preeti	Barso Re	2024-01-06 15:05:00
user_preeti	Sunn Raha Hai	2024-01-06 15:10:00
user_manoj	Khuda Jaane	2024-01-07 16:00:00
user_manoj	Piya O Re Piya	2024-01-07 16:05:00
user_manoj	Zoobi Doobi	2024-01-07 16:10:00
user_shweta	Agar Tum Mil Jao	2024-01-08 17:00:00
user_shweta	Bairi Piya	2024-01-08 17:05:00
user_shweta	Dola Re Dola	2024-01-08 17:10:00
user_varun	Radha	2024-01-09 18:00:00
user_varun	Teri Meri	2024-01-09 18:05:00
user_varun	Nagada Sang Dhol	2024-01-09 18:10:00
user_megha	Chikni Chameli	2024-01-10 19:00:00
user_megha	Chaar Kadam	2024-01-10 19:05:00
user_megha	Silsila Ye Chahat Ka	2024-01-10 19:10:00
user_nikhil	Mujhe Neend Na Aaye	2024-01-11 20:00:00
user_nikhil	Mera Dil Bhi Kitna Pagal Hai	2024-01-11 20:05:00
user_nikhil	Tum Mile	2024-01-11 20:10:00
user_priya	Tera Ban Jaunga	2024-01-12 21:00:00
user_priya	O Saathi	2024-01-12 21:05:00
user_priya	Dheere Dheere Se	2024-01-12 21:10:00
user_vivek	Jeene Laga Hoon	2024-01-13 22:00:00
user_vivek	Phir Bhi Tumko Chaahunga	2024-01-13 22:05:00
user_vivek	Hasi Ban Gaye	2024-01-13 22:10:00
user_sneha	Tum Jo Aaye	2024-01-14 23:00:00
user_sneha	Janam Janam	2024-01-14 23:05:00
user_sneha	Gerua	2024-01-14 23:10:00
user_deepak	Pal	2024-01-15 00:00:00
user_deepak	Mujhse Shaadi Karogi	2024-01-15 00:05:00
user_deepak	Kaun Tujhe	2024-01-15 00:10:00
user_anu	Raabta	2024-01-16 01:00:00
user_anu	Ghungroo	2024-01-16 01:05:00
user_anu	Nashe Si Chadh Gayi	2024-01-16 01:10:00
user_rohit	Kabhi Jo Baadal Barse	2024-01-17 02:00:00
user_rohit	Sanam Re	2024-01-17 02:05:00

50 rows in set (0.02 sec)

## 32.) DATE DIFFERENCE

```
mysql> SELECT username, (CURRENT_DATE - created_at) AS account_age_days FROM Users;
+-----+-----+
| username | account_age_days |
+-----+-----+
| user_amit | -20241089783046 |
| user_neha | -20241089783046 |
| user_rahul | -20241089783046 |
| user_riya | -20241089783046 |
| user_sahil | -20241089783046 |
| user_preeti | -20241089783046 |
| user_manoj | -20241089783046 |
| user_shweta | -20241089783046 |
| user_varun | -20241089783046 |
| user_megha | -20241089783046 |
| user_nikhil | -20241089783046 |
| user_priya | -20241089783046 |
| user_vivek | -20241089783046 |
| user_sneha | -20241089783046 |
| user_deepak | -20241089783046 |
| user_anu | -20241089783046 |
| user_rohit | -20241089783046 |
| user_anjali | -20241089783046 |
| user_rakesh | -20241089783046 |
| user_sona | -20241089783046 |
| user_kartik | -20241089783046 |
| user_shilpa | -20241089783046 |
| user_gautam | -20241089783046 |
| user_divya | -20241089783046 |
| user_ajay | -20241089783046 |
| user_tina | -20241089783046 |
| user_hemant | -20241089783046 |
| user_ruchi | -20241089783046 |
| user_vishal | -20241089783046 |
| user_pooja | -20241089783046 |
| user_abhinav | -20241089783046 |
| user_meera | -20241089783046 |
| user_ankit | -20241089783046 |
| user_lavanya | -20241089783046 |

```

### 33.) INDEX CREATION

```
mysql> CREATE INDEX idx_user_email ON Users (email);
Query OK, 0 rows affected (0.44 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> CREATE INDEX idx_playlist_song ON Playlist_Songs (playlist_id, song_id);
Query OK, 0 rows affected (0.04 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

### 34.) DROP INDEX

```
mysql> DROP INDEX idx_user_email on users;
Query OK, 0 rows affected (0.03 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

## 35.) CREATE VIEW

```
mysql> CREATE VIEW ConcertDetails AS
-> SELECT Concerts.concert_id, Concerts.concert_date, Venues.name AS venue_name, Venues.location, Concerts.ticket_price
-> FROM Concerts
-> JOIN Venues ON Concerts.venue_id = Venues.venue_id;
Query OK, 0 rows affected (0.01 sec)
```

## 36.) SELECTING FROM ABOVE VIEW

```
mysql> SELECT * FROM ConcertDetails WHERE concert_date > '2024-01-01';
+-----+-----+-----+-----+-----+
| concert_id | concert_date | venue_name | location | ticket_price |
+-----+-----+-----+-----+-----+
| 1 | 2024-11-10 | Nehru Indoor Stadium | Chennai, Tamil Nadu | 1500.00 |
| 2 | 2024-11-15 | JLN Stadium | New Delhi, Delhi | 2500.00 |
| 3 | 2024-11-20 | Brabourne Stadium | Mumbai, Maharashtra | 1200.00 |
| 4 | 2024-12-05 | Sawai Mansingh Stadium | Jaipur, Rajasthan | 3000.00 |
| 5 | 2024-12-10 | Indira Gandhi Indoor Stadium | New Delhi, Delhi | 1800.00 |
| 6 | 2024-12-15 | Shannmukhananda Hall | Mumbai, Maharashtra | 2000.00 |
| 7 | 2024-12-20 | Sree Kanteerava Indoor Stadium | Bengaluru, Karnataka | 1600.00 |
| 8 | 2024-12-25 | Talkatora Indoor Stadium | New Delhi, Delhi | 1300.00 |
| 9 | 2025-01-01 | Balewadi Stadium | Pune, Maharashtra | 2200.00 |
| 10 | 2025-01-05 | Phoenix Marketcity Amphitheatre | Mumbai, Maharashtra | 2400.00 |
| 11 | 2025-01-10 | Sardar Vallabhbhai Patel Indoor Stadium | Mumbai, Maharashtra | 2500.00 |
| 12 | 2025-01-15 | Kolkata Town Hall | Kolkata, West Bengal | 1900.00 |
| 13 | 2025-01-20 | Yashwantrao Chavan Auditorium | Mumbai, Maharashtra | 1450.00 |
| 14 | 2025-02-05 | Pragati Maidan | New Delhi, Delhi | 3100.00 |
| 15 | 2025-02-10 | Chowdiah Memorial Hall | Bengaluru, Karnataka | 2050.00 |
| 16 | 2025-02-15 | Sirifort Auditorium | New Delhi, Delhi | 2300.00 |
| 17 | 2025-02-20 | Mahalakshmi Race Course | Mumbai, Maharashtra | 1650.00 |
| 18 | 2025-03-01 | Indira Gandhi Pratishthan | Lucknow, Uttar Pradesh | 1350.00 |
| 19 | 2025-03-10 | Pyramid Valley International | Bengaluru, Karnataka | 2400.00 |
| 20 | 2025-03-15 | Jawaharlal Nehru Stadium | Kochi, Kerala | 2600.00 |
| 21 | 2025-03-20 | Kala Academy | Panaji, Goa | 2700.00 |
| 22 | 2025-03-25 | Nandan Auditorium | Kolkata, West Bengal | 2100.00 |
| 23 | 2025-04-05 | Bharatiya Vidya Bhawan | Chennai, Tamil Nadu | 1500.00 |
| 24 | 2025-04-10 | Rajiv Gandhi Indoor Stadium | Visakhapatnam, Andhra Pradesh | 3200.00 |
| 25 | 2025-04-15 | Sri Sathy Sai Auditorium | New Delhi, Delhi | 1750.00 |
| 26 | 2025-04-20 | Gandhi Maidan | Patna, Bihar | 2900.00 |
| 27 | 2025-04-25 | Rajpath Club | Ahmedabad, Gujarat | 1850.00 |
| 28 | 2025-05-01 | Kingdom of Dreams | Gurugram, Haryana | 1550.00 |
| 29 | 2025-05-10 | Biswa Bangla Convention Centre | Kolkata, West Bengal | 2400.00 |
| 30 | 2025-05-15 | Eco Park | Kolkata, West Bengal | 2500.00 |
| 31 | 2025-05-20 | Lucknow Stadium | Lucknow, Uttar Pradesh | 3100.00 |
| 32 | 2025-05-25 | Birla Auditorium | Jaipur, Rajasthan | 2000.00 |
| 33 | 2025-06-01 | Science City Auditorium | Kolkata, West Bengal | 1300.00 |
| 34 | 2025-06-05 | Kanteerava Outdoor Stadium | Bengaluru, Karnataka | 2200.00 |
| 35 | 2025-06-10 | Ravindra Bharathi | Hyderabad, Telangana | 2400.00 |
| 36 | 2025-06-15 | Lal Parade Ground | Bhopal, Madhya Pradesh | 2500.00 |
| 37 | 2025-06-20 | Bal Bhavan | Bengaluru, Karnataka | 1900.00 |

+-----+-----+-----+-----+-----+
```

## 37.) UPDATING VIEW

```
mysql> UPDATE ConcertDetails SET ticket_price = ticket_price * 1.1 WHERE concert_date < '2024-12-31';
Query OK, 8 rows affected (0.03 sec)
Rows matched: 8  Changed: 8  Warnings: 0
```

## 38.) VIEW WITH CALCULATED FIELD

```
mysql> CREATE VIEW UserSongSummary AS
-> SELECT Users.username, COUNT(User_Song_History.song_id) AS total_songs_played, SUM(User_Song_History.duration_played) AS total_duration
-> FROM User_Song_History
-> JOIN Users ON User_Song_History.user_id = Users.user_id
-> GROUP BY Users.username;
Query OK, 0 rows affected (0.01 sec)
```

## 39.) INSERT TRIGGER : LOGS ENTRY EVERY TIME NEW USER IS INSERTED INTO USERS TABLE

```
--> \c
mysql> CREATE TRIGGER after_user_insert
-> AFTER INSERT ON Users
-> FOR EACH ROW
-> BEGIN
->     INSERT INTO User_Song_History (user_id, song_id, duration_played)
->     VALUES (NEW.user_id, NULL, 0); -- Initializes a new history record
-> END//'
Query OK, 0 rows affected (0.02 sec)
```

## 40.) STORED FUNCTION-This function takes a user\_id as input and returns the total duration (in seconds) that the user has played songs.\

```
mysql> DELIMITER $$
mysql>
mysql> CREATE FUNCTION GetTotalDurationPlayed(userId INT)
-> RETURNS INT
-> DETERMINISTIC
-> BEGIN
->     DECLARE total_duration INT;
->
->     -- Calculate the total duration played by the user
->     SELECT SUM(duration_played) INTO total_duration
->     FROM User_Song_History
->     WHERE user_id = userId;
->
->     -- Return 0 if no records exist
->     RETURN IFNULL(total_duration, 0);
-> END$$
Query OK, 0 rows affected (0.12 sec)

mysql>
mysql> DELIMITER ;
mysql> SELECT GetTotalDurationPlayed(1) AS TotalDuration;
+-----+
| TotalDuration |
+-----+
|      530      |
+-----+
1 row in set (0.02 sec)
```

## 41.) STORED PROCEDURE : Takes User\_ID and displays user history

```
mysql>
mysql> DELIMITER $$

mysql>
mysql> CREATE PROCEDURE GetUserSongHistory(IN user_id INT)
-> BEGIN
->     SELECT Songs.title, User_Song_History.played_at, User_Song_History.duration_played
->     FROM User_Song_History
->     JOIN Songs ON User_Song_History.song_id = Songs.song_id
->     WHERE User_Song_History.user_id = user_id
->     ORDER BY User_Song_History.played_at DESC;
-> END$$
Query OK, 0 rows affected (0.33 sec)

mysql>
mysql> DELIMITER ;
mysql> Call getusersonghistory(1);
+-----+-----+-----+
| title | played_at | duration_played |
+-----+-----+-----+
| Tujh Mein Rab Dikhta Hai | 2024-01-01 10:10:00 | 150 |
| Kal Ho Naa Ho | 2024-01-01 10:05:00 | 200 |
| Tum Hi Ho | 2024-01-01 10:00:00 | 180 |
+-----+-----+-----+
3 rows in set (0.04 sec)

Query OK, 0 rows affected (0.05 sec)

mysql> Call getusersonghistory(5);
+-----+-----+-----+
| title | played_at | duration_played |
+-----+-----+-----+
| Moh Moh Ke Dhaage | 2024-01-05 14:10:00 | 230 |
| Deewani Mastani | 2024-01-05 14:05:00 | 195 |
| Sawaar Loon | 2024-01-05 14:00:00 | 185 |
+-----+-----+-----+
3 rows in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)
```