**CREATE Table Queries:**

CREATE TABLE users (

u\_id INTEGER PRIMARY KEY AUTOINCREMENT,

name VARCHAR (100),

email TEXT);

CREATE TABLE playlists (

p\_id INTEGER PRIMARY KEY AUTOINCREMENT,

name VARCHAR(50),

description VARCHAR(200),

u\_id BIGINT UNSIGNED,

FOREIGN KEY (u\_id) REFERENCES users(u\_id) ON DELETE CASCADE);

CREATE TABLE artist (

a\_id INTEGER PRIMARY KEY AUTOINCREMENT,

name VARCHAR (100));

CREATE TABLE tracks (

t\_id INTEGER PRIMARY KEY AUTOINCREMENT,

name VARCHAR(100),

duration INTEGER,

a\_id BIGINT UNSIGNED,

FOREIGN KEY (a\_id) REFERENCES artist(a\_id) ON DELETE CASCADE);

CREATE TABLE playlist\_track(

pt\_id INTEGER PRIMARY KEY AUTOINCREMENT,

p\_id BIGINT UNSIGNED,

t\_id BIGINT UNSIGNED,

FOREIGN KEY (p\_id) REFERENCES playlists(p\_id) ON DELETE CASCADE,

FOREIGN KEY (t\_id) REFERENCES tracks(t\_id) ON DELETE CASCADE);

**INSERT Table Queries:**

INSERT INTO users (name, email) VALUES

('Harry Potter', 'harrypotter@gmail.com'),

('Ron Weasley', 'ronweasley@gmail.com'),

('Hermione', 'hermione@gmail.com'),

('Dumbledore', 'dumbledore@gmail.com');

1

Harry Potter

harrypotter@gmail.com

2

Ron Weasley

ronweasley@gmail.com

3

Hermione

hermione@gmail.com

4

Dumbledore

dumbledore@gmail.com

INSERT INTO playlists (name, description,u\_id) VALUES

('New Hits', 'Latest Hits close to heart', 1),

('English Songs', 'All party mood songs',3),

('Favourites', 'All time favourite songs ',4),

('Melody', 'Songs to accompany for a coffee',1),

('Romantic Songs','Songs of Love',3);

1

New Hits

Latest Hits close to heart

1

2

English Songs

All party mood songs

3

3

Favourites

All time favourite songs

4

4

Melody

Songs to accompany for a coffee

1

5

Romantic Songs

Songs of Love

3

INSERT INTO artist (name) VALUES

('Justin Bieber'),

('Sonu Nigam'),

('Honey Singh'),

('Ankit Tiwari');

1

Justin Bieber

2

Sonu Nigam

3

Honey Singh

4

Ankit Tiwari

INSERT INTO tracks (name, duration,a\_id) VALUES

('My Love', 320, 1),

('Dil Se', 260,3),

('Tum Hi Ho',330,4),

('Goodbya Baby', 236,3);

1

My Love

320

1

2

Dil Se

260

3

3

Tum Hi Ho

330

4

4

Goodbya Baby

236

3

INSERT INTO playlist\_track (p\_id, t\_id) VALUES

(4, 1),(2,3),(1,4),(3,2),(4,3),(4,2),

(2,1),(1,2), (3,3),(3,4);

1

4

1

2

2

3

3

1

4

4

3

2

5

4

3

6

4

2

7

2

1

8

1

2

9

3

3

10

3

4

Q1:How many users have registered with our app?

SELECT count(u\_id) from users;

Q2:Tracks count per playlist

select p.name, count(p.p\_id) from playlists p INNER JOIN playlist\_track pt on p.p\_id = pt.p\_id GROUP BY pt.p\_id

Q3:Details of the playlist for a given user name

select u.name,p.name,p.description from playlists p INNER JOIN users u on p.u\_id = u.u\_id

select u.name as 'username',p.name as 'playlist name',p.description from playlists p INNER JOIN users u on p.u\_id = u.u\_id ORDER BY u.u\_id

Q4:Most popular artist’s name (Most tracks by that artist)

select a.name,count(t.a\_id) from tracks t INNER JOIN artist a on t.a\_id = a.a\_id GROUP BY t.a\_id

SELECT a\_id, COUNT(a\_id) AS `value\_occurrence` FROM tracks GROUP BY a\_id ORDER BY `value\_occurrence`

select a.name as 'artist name',COUNT(t.a\_id) AS 'no of songs' FROM tracks t INNER JOIN artist a on t.a\_id = a.a\_id GROUP BY t.a\_id

Q5:Longest track (in terms of time)

select name,duration from tracks where duration in (select max(duration) from tracks)

Q5:Which users have no playlists?

SELECT u.name from users u LEFT JOIN playlists p on u.u\_id=p.u\_id WHERE p.u\_id is NULL

Q6:Details of playlists which are empty

SELECT p.name,p.description from playlists p LEFT JOIN playlist\_track pt on p.p\_id=pt.p\_id where pt.p\_id is NULL