

SQL Task 5

First of all, we need to create a database name as apple_music_db

```
Create database apple_music_db ;  
Use apple_music_db ;
```

Now we will create a table name as users.

```
CREATE TABLE users (  
    User_id INT PRIMARY KEY,  
    Username VARCHAR(200),  
    email VARCHAR(200),  
    country VARCHAR(200)  
);
```

Now we will insert values in our table from the datasets.

	User_id	Username	email	country
►	1	deandavid	carolkennedy@gmail.com	French Polynesia
	2	steve09	ostevens@gmail.com	Nicaragua
	3	beth04	pdavis@fisher.com	Israel
	4	etaylor	currytaylor@hotmail.com	Nigeria
	5	nicholasmorgan	jamiemckinney@gmail.com	Qatar
	6	kevin41	yhartman@roberts-liu.info	Holy See (Vatican City State)
	7	javier77	jeffreyhamilton@yahoo.com	Angola
	8	ksellers	diana15@ellis.com	Ethiopia
	9	rodriguezjoshua	stevenowens@taylor-cole.biz	Namibia
	10	davismichael	vpearson@hotmail.com	Uruguay

Now we will create another table name as artists.

```
CREATE TABLE artists (  
    artist_id INT PRIMARY KEY,  
    name VARCHAR(50),  
    country VARCHAR(50),  
    debut_year INT  
);
```

We will insert values from the datasets.

	artist_id	name	country	debut_year
▶	1	Jessica Parker	Belgium	1997
	2	Tonya Hess	Romania	1991
	3	Tammy Stanton	Turks and Caicos Islands	2007
	4	Kim Foster	Iraq	2005
	5	Lauren Johnson	Ghana	2004
	6	Krystal Green	Trinidad and Tobago	1998
	7	Nicholas Gallegos	Bangladesh	1996
	8	Taylor Evans	Denmark	1995
	9	Mary Hanson	Tonga	2017
	10	Michael Nnuiwen	Cote d'Ivoire	1992

Now again we will create another table name as albums.

```
CREATE TABLE albums (  
    album_id INT PRIMARY KEY,  
    title VARCHAR(200),  
    release_date DATE,  
    artist_id INT,  
    FOREIGN KEY (artist_id)  
        REFERENCES artists (artist_id)  
);
```

We will insert some values in the above table.

	album_id	title	release_date	artist_id
▶	1	Profound disintermediate projection	2021-12-29	138
	2	Object-based multi-state budgetary management	2022-02-19	115
	3	Optimized local collaboration	2020-02-15	36
	4	Managed mission-critical time-frame	2017-08-20	109
	5	Ameliorated multi-state flexibility	2020-02-18	47
	6	Quality-focused secondary emulation	2020-02-09	72
	7	Reactive empowering capability	2021-01-17	119
	8	Vision-oriented next generation productivity	2025-05-28	64
	9	Ameliorated 3rdgeneration approach	2023-11-16	20
	10	Virtual optimizing collaboration	2018-08-21	114

Now we will create our last table name as songs.

```
CREATE TABLE songs (  
    song_id INT PRIMARY KEY,  
    title VARCHAR(200),  
    duration INT,  
    genre VARCHAR(50),  
    album_id INT,  
    FOREIGN KEY (album_id)  
        REFERENCES albums (album_id)  
);
```

Now we will insert some values in the above table.

	song_id	title	duration	genre	album_id
▶	1	Nature become this easy	316	Classical	267
	2	Trade space anyone	280	Rock	141
	3	Another discussion	139	EDM	147
	4	This friend	189	Jazz	164
	5	First vote tonight	140	Rock	78
	6	Art happy that	218	EDM	79
	7	Already pay lay likely	174	Pop	213
	8	Safe Democrat memory	204	R&B	239
	9	Government especially mouth push	135	Rock	216
	10	She nav activity	351	Classical	300

Now we will perform Inner join in given tables.

```
SELECT
    *
FROM
    artists
    JOIN
    albums ON artists.artist_id = albums.artist_id
    INNER JOIN
    songs ON songs.album_id = albums.album_id;
```

Result :

	artist_id	name	country	debut_year	album_id	title	release_date	artist_id	song_id	title
▶	138	Shawn Lane	Greece	2005	1	Profound disintermediate projection	2021-12-29	138	1534	Situati
	138	Shawn Lane	Greece	2005	1	Profound disintermediate projection	2021-12-29	138	1704	Speak
	115	Aaron Campbell	Nauru	2019	2	Object-based multi-state budgetary management	2022-02-19	115	1086	Alone
	115	Aaron Campbell	Nauru	2019	2	Object-based multi-state budgetary management	2022-02-19	115	1240	Medic
	115	Aaron Campbell	Nauru	2019	2	Object-based multi-state budgetary management	2022-02-19	115	2886	Really
	36	Mark Young	Indonesia	2006	3	Optimized local collaboration	2020-02-15	36	744	Need j
	36	Mark Young	Indonesia	2006	3	Optimized local collaboration	2020-02-15	36	811	What
	36	Mark Young	Indonesia	2006	3	Optimized local collaboration	2020-02-15	36	2225	Paintir
	36	Mark Young	Indonesia	2006	3	Optimized local collaboration	2020-02-15	36	2257	Allow

Now we will perform left join in given table.

```
SELECT
    *
FROM
    albums
    LEFT JOIN
    songs ON albums.album_id = songs.album_id;
```

Result:

	album_id	title	release_date	artist_id	song_id	title	duration	genre	album_id
▶	1	Profound disintermediate projection	2021-12-29	138	1534	Situation have who	181	EDM	1
	1	Profound disintermediate projection	2021-12-29	138	1704	Speak	213	Hip-Hop	1
	2	Object-based multi-state budgetary management	2022-02-19	115	1086	Alone recently	133	Jazz	2
	2	Object-based multi-state budgetary management	2022-02-19	115	1240	Medical	204	Rock	2
	2	Object-based multi-state budgetary management	2022-02-19	115	2886	Really address pressure	346	Hip-Hop	2
	3	Optimized local collaboration	2020-02-15	36	744	Need pretty	147	Pop	3
	3	Optimized local collaboration	2020-02-15	36	811	What	229	Hip-Hop	3
	3	Optimized local collaboration	2020-02-15	36	2225	Painting	158	R&B	3
	3	Optimized local collaboration	2020-02-15	36	2757	Allow tonight	266	EDM	3
	3	Optimized local collaboration	2020-02-15	36	2893	Minute soldier	234	Jazz	3

Now we will perform right join in given table.

```
SELECT
    *
FROM
    artists
    RIGHT JOIN
    albums ON artists.artist_id = albums.artist_id;
```

Result:

	artist_id	name	country	debut_year	album_id	title	release_date	artist_id
▶	138	Shawn Lane	Greece	2005	1	Profound disintermediate projection	2021-12-29	138
	115	Aaron Campbell	Nauru	2019	2	Object-based multi-state budgetary management	2022-02-19	115
	36	Mark Young	Indonesia	2006	3	Optimized local collaboration	2020-02-15	36
	109	Rhonda Johnson	Portugal	2007	4	Managed mission-critical time-frame	2017-08-20	109
	47	Kelly Diaz	Mauritius	2004	5	Ameliorated multi-state flexibility	2020-02-18	47
	72	Robin Anderson	Gambia	1992	6	Quality-focused secondary emulation	2020-02-09	72
	119	Joel Graves	Christmas Island	2001	7	Reactive empowering capability	2021-01-17	119
	64	Dana Thompson	Grenada	2000	8	Vision-oriented next generation productivity	2025-05-28	64
	20	Steve Ward	Slovenia	2018	9	Ameliorated 3rdgeneration approach	2023-11-16	20
	114	Jennifer Drake	Benin	2000	10	Virtual optimization collaboration	2018-08-21	114

Foreign keys:

```
FOREIGN KEY (artist_id)
    REFERENCES artists (artist_id)
```

```
FOREIGN KEY (album_id)
    REFERENCES albums (album_id)
```

EER diagram :

