SQL Task 4

First of all, we need to create a database as spotify_db

```
Create database spotify_db ;
Use spotify_db ;
```

Now we will create a table name as artists.

```
Create table artists (
artist_id int primary key,
artist_name varchar(200),
country varchar(200)
);
```

We have inserted data with the help of import wizard.

	artist_id	artist_name	country
▶	1	The Weeknd	Canada
	2	Dua Lipa	UK
	3	Justin Bieber	Canada
	4	Olivia Rodrigo	USA
	5	Lil Nas X	USA
*	NULL	NULL	NULL

Now we will perform aggregations functions with group by statement.

```
SELECT
    COUNT(artist_id), artist_name
FROM
    artists
GROUP BY artist_name;
```

Result :

	COUNT(artist_id)	artist_name
▶	1	The Weeknd
	1	Dua Lipa
	1	Justin Bieber
	1	Olivia Rodrigo
	1	Lil Nas X

Now we will create another table name as tracks.

```sql
Create table tracks (
track_id int primary key,
track_name varchar(200),
artist_id int,
release_year int,
popularity int,
foreign key(artist_id) references artists(artist_id)
);
```

We will perform aggregations functions here with having clause.

```sql
SELECT
    COUNT(track_id), release_year
FROM
    tracks
GROUP BY release_year
HAVING release_year = '2021';
```

Result:

	COUNT(track_id)	release_year
▶	7	2021

Now we will create another table name as audio features.

```sql
Create table audio_features (
track_id int ,
danceability float,
energy float,
valence float,
tempo int,
foreign key (track_id) references tracks(track_id)
);
```

Now we will use aggregations functions such as max , count , min etc.

```sql
SELECT
    track_id, MAX(energy)
FROM
    audio_features
GROUP BY track_id;
```

EER diagram:

tracks
- track_id INT
- track_name VARCHAR(20...)
- artist_id INT
- release_year INT
- popularity INT
- Indexes

artists
- artist_id INT
- artist_name VARCHAR(20...)
- country VARCHAR(200)
- Indexes

audio_featur...
- track_id INT
- danceability FLOAT
- energy FLOAT
- valence FLOAT
- tempo INT
- Indexes