Challenge 6: Playlist maker

Tuesday, April 4, 2017   12:55 PM

We've created a database of songs and artists, and you'll make playlists from them in this challenge. In this first step, select the title of all the songs by the artist named 'Queen'.

EXTENDED TO INCLUDE Queensryche for fuzzy search.

```
CREATE TABLE artists (
    id INTEGER PRIMARY KEY AUTOINCREMENT,
    name TEXT,
    country TEXT,
    genre TEXT);

INSERT INTO artists (name, country, genre)
    VALUES ("Taylor Swift", "US", "Pop");
INSERT INTO artists (name, country, genre)
    VALUES ("Led Zeppelin", "US", "Hard rock");
INSERT INTO artists (name, country, genre)
    VALUES ("ABBA", "Sweden", "Disco");

INSERT INTO artists (name, country, genre)
    VALUES ("Queen", "UK", "Rock");
    INSERT INTO artists (name, country, genre)
    VALUES ("Queensrÿche", "Germany", "Rock");

INSERT INTO artists (name, country, genre)
    VALUES ("Celine Dion", "Canada", "Pop");
INSERT INTO artists (name, country, genre)
    VALUES ("Meatloaf", "US", "Hard rock");
INSERT INTO artists (name, country, genre)
    VALUES ("Garth Brooks", "US", "Country");
INSERT INTO artists (name, country, genre)
    VALUES ("Shania Twain", "Canada", "Country");
INSERT INTO artists (name, country, genre)
    VALUES ("Rihanna", "US", "Pop");
INSERT INTO artists (name, country, genre)
    VALUES ("Guns N' Roses", "US", "Hard rock");
INSERT INTO artists (name, country, genre)
    VALUES ("Gloria Estefan", "US", "Pop");
INSERT INTO artists (name, country, genre)
    VALUES ("Bob Marley", "Jamaica", "Reggae");

CREATE TABLE songs (
    id INTEGER PRIMARY KEY AUTOINCREMENT,
    artist TEXT,
    title TEXT);

INSERT INTO songs (artist, title)
    VALUES ("Taylor Swift", "Shake it off");
INSERT INTO songs (artist, title)
    VALUES ("Rihanna", "Stay");
INSERT INTO songs (artist, title)
    VALUES ("Celine Dion", "My heart will go on");
INSERT INTO songs (artist, title)
    VALUES ("Celine Dion", "A new day has come");
INSERT INTO songs (artist, title)
    VALUES ("Shania Twain", "Party for two");
INSERT INTO songs (artist, title)
    VALUES ("Gloria Estefan", "Conga");
INSERT INTO songs (artist, title)
    VALUES ("Led Zeppelin", "Stairway to heaven");
```

DATABASE SCHEMA

artists
13 rows

id (PK)	INTEGER
name	TEXT
country	TEXT
genre	TEXT

songs
12 rows

id (PK)	INTEGER
artist	TEXT
title	TEXT

RESULTS

title	artist
Bicycle Race	Queen
Bohemian Rhapsody	Queen
Eyes Of A Stranger	Queensrÿche

```
INSERT INTO songs (artist, title)
   VALUES ("ABBA", "Mamma mia");

INSERT INTO songs (artist, title)
   VALUES ("Queen", "Bicycle Race");
INSERT INTO songs (artist, title)
   VALUES ("Queen", "Bohemian Rhapsody");
INSERT INTO songs (artist, title)
   VALUES ("Queensrÿche", "Eyes Of A Stranger");

INSERT INTO songs (artist, title)
   VALUES ("Guns N' Roses", "Don't cry");

SELECT title, artist FROM songs WHERE artist IN (SELECT
name FROM artists WHERE name LIKE "%queen%");
```

We've created a database of songs and artists, and you'll make playlists from them in this challenge. In this first step, select the title of all the songs by the artist named 'Queen'.

```
CREATE TABLE artists (
   id INTEGER PRIMARY KEY AUTOINCREMENT,
   name TEXT,
   country TEXT,
   genre TEXT);

INSERT INTO artists (name, country, genre)
   VALUES ("Taylor Swift", "US", "Pop");
INSERT INTO artists (name, country, genre)
   VALUES ("Led Zeppelin", "US", "Hard rock");
INSERT INTO artists (name, country, genre)
   VALUES ("ABBA", "Sweden", "Disco");
INSERT INTO artists (name, country, genre)
   VALUES ("Queen", "UK", "Rock");
INSERT INTO artists (name, country, genre)
   VALUES ("Celine Dion", "Canada", "Pop");
INSERT INTO artists (name, country, genre)
   VALUES ("Meatloaf", "US", "Hard rock");
INSERT INTO artists (name, country, genre)
   VALUES ("Garth Brooks", "US", "Country");
INSERT INTO artists (name, country, genre)
   VALUES ("Shania Twain", "Canada", "Country");
INSERT INTO artists (name, country, genre)
   VALUES ("Rihanna", "US", "Pop");
INSERT INTO artists (name, country, genre)
   VALUES ("Guns N' Roses", "US", "Hard rock");
INSERT INTO artists (name, country, genre)
   VALUES ("Gloria Estefan", "US", "Pop");
INSERT INTO artists (name, country, genre)
   VALUES ("Bob Marley", "Jamaica", "Reggae");

CREATE TABLE songs (
   id INTEGER PRIMARY KEY AUTOINCREMENT,
   artist TEXT,
   title TEXT);

INSERT INTO songs (artist, title)
   VALUES ("Taylor Swift", "Shake it off");
INSERT INTO songs (artist, title)
   VALUES ("Rihanna", "Stay");
INSERT INTO songs (artist, title)
   VALUES ("Celine Dion", "My heart will go on");
INSERT INTO songs (artist, title)
   VALUES ("Celine Dion", "A new day has come");
INSERT INTO songs (artist, title)
   VALUES ("Shania Twain", "Party for two");
```

RESULTS

title
Bicycle Race
Bohemian Rhapsody

name
Taylor Swift
Celine Dion
Rihanna
Gloria Estefan

title
Shake it off
Stay
My heart will go on
A new day has come
Conga

```
INSERT INTO songs (artist, title)
   VALUES ("Gloria Estefan", "Conga");
INSERT INTO songs (artist, title)
   VALUES ("Led Zeppelin", "Stairway to heaven");
INSERT INTO songs (artist, title)
   VALUES ("ABBA", "Mamma mia");
INSERT INTO songs (artist, title)
   VALUES ("Queen", "Bicycle Race");
INSERT INTO songs (artist, title)
   VALUES ("Queen", "Bohemian Rhapsody");
INSERT INTO songs (artist, title)
   VALUES ("Guns N' Roses", "Don't cry");

SELECT title FROM songs WHERE artist IN (SELECT name FROM artists
WHERE name LIKE "%queen%");

SELECT name FROM artists WHERE genre = "Pop";

SELECT title FROM songs WHERE artist IN (SELECT name FROM artists
WHERE genre = "Pop");
```

EXTENDED TO INCLUDE Queensryche for fuzzy search.	```CREATE TABLE artists (
   id INTEGER PRIMARY KEY AUTOINCREMENT,
   name TEXT,
   country TEXT,
   genre TEXT);

INSERT INTO artists (name, country, genre)
   VALUES ("Taylor Swift", "US", "Pop");
INSERT INTO artists (name, country, genre)
   VALUES ("Led Zeppelin", "US", "Hard rock");
INSERT INTO artists (name, country, genre)
   VALUES ("ABBA", "Sweden", "Disco");

INSERT INTO artists (name, country, genre)
   VALUES ("Queen", "UK", "Rock");
   INSERT INTO artists (name, country, genre)
   VALUES ("Queensrÿche", "Germany", "Rock");

INSERT INTO artists (name, country, genre)
   VALUES ("Celine Dion", "Canada", "Pop");
INSERT INTO artists (name, country, genre)
   VALUES ("Meatloaf", "US", "Hard rock");
INSERT INTO artists (name, country, genre)
   VALUES ("Garth Brooks", "US", "Country");
INSERT INTO artists (name, country, genre)
   VALUES ("Shania Twain", "Canada", "Country");
INSERT INTO artists (name, country, genre)
   VALUES ("Rihanna", "US", "Pop");
INSERT INTO artists (name, country, genre)
   VALUES ("Guns N' Roses", "US", "Hard rock");
INSERT INTO artists (name, country, genre)
   VALUES ("Gloria Estefan", "US", "Pop");
INSERT INTO artists (name, country, genre)
   VALUES ("Bob Marley", "Jamaica", "Reggae");

CREATE TABLE songs (
   id INTEGER PRIMARY KEY AUTOINCREMENT,
   artist TEXT,
   title TEXT);

INSERT INTO songs (artist, title)
   VALUES ("Taylor Swift", "Shake it off");
INSERT INTO songs (artist, title)
   VALUES ("Rihanna", "Stay");
INSERT INTO songs (artist, title)``` | DATABASE SCHEMA

artists 13 rows
id (PK)INTEGER

nameTEXT
countryTEXT
genreTEXT

songs 12 rows
id (PK)INTEGER

artistTEXT
titleTEXT

RESULTS

title	artist
Bicycle Race	Queen
Bohemian Rhapsody	Queen
Eyes Of A Stranger	Queensrÿche	

```
   VALUES ("Celine Dion", "My heart will go on");
INSERT INTO songs (artist, title)
   VALUES ("Celine Dion", "A new day has come");
INSERT INTO songs (artist, title)
   VALUES ("Shania Twain", "Party for two");
INSERT INTO songs (artist, title)
   VALUES ("Gloria Estefan", "Conga");
INSERT INTO songs (artist, title)
   VALUES ("Led Zeppelin", "Stairway to heaven");
INSERT INTO songs (artist, title)
   VALUES ("ABBA", "Mamma mia");


INSERT INTO songs (artist, title)
   VALUES ("Queen", "Bicycle Race");
INSERT INTO songs (artist, title)
   VALUES ("Queen", "Bohemian Rhapsody");
INSERT INTO songs (artist, title)
   VALUES ("Queensrÿche", "Eyes Of A Stranger");


INSERT INTO songs (artist, title)
   VALUES ("Guns N' Roses", "Don't cry");


SELECT title, artist FROM songs WHERE artist IN (SELECT name FROM artists
WHERE name LIKE "%queen%");
```

Now you'll make a 'Pop' playlist. In preparation, select the name of all of the artists from the 'Pop' genre. (Tip: Make sure you type it 'Pop', SQL considers that different from 'pop'.)	(code below)	(schema/results)

```
CREATE TABLE artists (
   id INTEGER PRIMARY KEY AUTOINCREMENT,
   name TEXT,
   country TEXT,
   genre TEXT);

INSERT INTO artists (name, country, genre)
   VALUES ("Taylor Swift", "US", "Pop");
INSERT INTO artists (name, country, genre)
   VALUES ("Led Zeppelin", "US", "Hard rock");
INSERT INTO artists (name, country, genre)
   VALUES ("ABBA", "Sweden", "Disco");
INSERT INTO artists (name, country, genre)
   VALUES ("Queen", "UK", "Rock");
INSERT INTO artists (name, country, genre)
   VALUES ("Celine Dion", "Canada", "Pop");
INSERT INTO artists (name, country, genre)
   VALUES ("Meatloaf", "US", "Hard rock");
INSERT INTO artists (name, country, genre)
   VALUES ("Garth Brooks", "US", "Country");
INSERT INTO artists (name, country, genre)
   VALUES ("Shania Twain", "Canada", "Country");
INSERT INTO artists (name, country, genre)
   VALUES ("Rihanna", "US", "Pop");
INSERT INTO artists (name, country, genre)
   VALUES ("Guns N' Roses", "US", "Hard rock");
INSERT INTO artists (name, country, genre)
   VALUES ("Gloria Estefan", "US", "Pop");
INSERT INTO artists (name, country, genre)
   VALUES ("Bob Marley", "Jamaica", "Reggae");

CREATE TABLE songs (
   id INTEGER PRIMARY KEY AUTOINCREMENT,
   artist TEXT,
   title TEXT);

INSERT INTO songs (artist, title)
   VALUES ("Taylor Swift", "Shake it off");
INSERT INTO songs (artist, title)
   VALUES ("Rihanna", "Stay");
INSERT INTO songs (artist, title)
```

DATABASE SCHEMA

artists
12 rows
id (PK)INTEGER

nameTEXT
countryTEXT
genreTEXT

songs
11 rows
id (PK)INTEGER

artistTEXT
titleTEXT

RESULTS

title
Bicycle Race
Bohemian Rhapsody

name
Taylor Swift
Celine Dion
Rihanna
Gloria Estefan

title
Shake it off
Stay
My heart will go on
A new day has come
Conga

```sql
   VALUES ("Celine Dion", "My heart will go on");
INSERT INTO songs (artist, title)
   VALUES ("Celine Dion", "A new day has come");
INSERT INTO songs (artist, title)
   VALUES ("Shania Twain", "Party for two");
INSERT INTO songs (artist, title)
   VALUES ("Gloria Estefan", "Conga");
INSERT INTO songs (artist, title)
   VALUES ("Led Zeppelin", "Stairway to heaven");
INSERT INTO songs (artist, title)
   VALUES ("ABBA", "Mamma mia");
INSERT INTO songs (artist, title)
   VALUES ("Queen", "Bicycle Race");
INSERT INTO songs (artist, title)
   VALUES ("Queen", "Bohemian Rhapsody");
INSERT INTO songs (artist, title)
   VALUES ("Guns N' Roses", "Don't cry");

SELECT title FROM songs WHERE artist IN (SELECT name FROM artists
WHERE name LIKE "%queen%");

SELECT name FROM artists WHERE genre = "Pop";

SELECT title FROM songs WHERE artist IN (SELECT name FROM artists
WHERE genre = "Pop");
```

| To finish creating the 'Pop' playlist, add another query that will select the title of all the songs from the 'Pop' artists. It should use IN on a nested subquery that's based on your previous query. | ```sql
CREATE TABLE artists (
   id INTEGER PRIMARY KEY AUTOINCREMENT,
   name TEXT,
   country TEXT,
   genre TEXT);

INSERT INTO artists (name, country, genre)
   VALUES ("Taylor Swift", "US", "Pop");
INSERT INTO artists (name, country, genre)
   VALUES ("Led Zeppelin", "US", "Hard rock");
INSERT INTO artists (name, country, genre)
   VALUES ("ABBA", "Sweden", "Disco");
INSERT INTO artists (name, country, genre)
   VALUES ("Queen", "UK", "Rock");
INSERT INTO artists (name, country, genre)
   VALUES ("Celine Dion", "Canada", "Pop");
INSERT INTO artists (name, country, genre)
   VALUES ("Meatloaf", "US", "Hard rock");
INSERT INTO artists (name, country, genre)
   VALUES ("Garth Brooks", "US", "Country");
INSERT INTO artists (name, country, genre)
   VALUES ("Shania Twain", "Canada", "Country");
INSERT INTO artists (name, country, genre)
   VALUES ("Rihanna", "US", "Pop");
INSERT INTO artists (name, country, genre)
   VALUES ("Guns N' Roses", "US", "Hard rock");
INSERT INTO artists (name, country, genre)
   VALUES ("Gloria Estefan", "US", "Pop");
INSERT INTO artists (name, country, genre)
   VALUES ("Bob Marley", "Jamaica", "Reggae");

CREATE TABLE songs (
   id INTEGER PRIMARY KEY AUTOINCREMENT,
   artist TEXT,
   title TEXT);

INSERT INTO songs (artist, title)
   VALUES ("Taylor Swift", "Shake it off");
INSERT INTO songs (artist, title)
   VALUES ("Rihanna", "Stay");
``` | DATABASE SCHEMA<br><br>**artists** 12 rows<br>id (PK) INTEGER<br>name TEXT<br>country TEXT<br>genre TEXT<br><br>**songs** 11 rows<br>id (PK) INTEGER<br>artist TEXT<br>title TEXT<br><br>RESULTS<br><br>**title**<br>Bicycle Race<br>Bohemian Rhapsody<br><br>**name**<br>Taylor Swift<br>Celine Dion<br>Rihanna<br>Gloria Estefan<br><br>**title**<br>Shake it off<br>Stay<br>My heart will go on<br>A new day has come<br><br>Conga |

```sql
INSERT INTO songs (artist, title)
    VALUES ("Celine Dion", "My heart will go on");
INSERT INTO songs (artist, title)
    VALUES ("Celine Dion", "A new day has come");
INSERT INTO songs (artist, title)
    VALUES ("Shania Twain", "Party for two");
INSERT INTO songs (artist, title)
    VALUES ("Gloria Estefan", "Conga");
INSERT INTO songs (artist, title)
    VALUES ("Led Zeppelin", "Stairway to heaven");
INSERT INTO songs (artist, title)
    VALUES ("ABBA", "Mamma mia");
INSERT INTO songs (artist, title)
    VALUES ("Queen", "Bicycle Race");
INSERT INTO songs (artist, title)
    VALUES ("Queen", "Bohemian Rhapsody");
INSERT INTO songs (artist, title)
    VALUES ("Guns N' Roses", "Don't cry");

SELECT title FROM songs WHERE artist IN (SELECT name FROM artists
WHERE name LIKE "%queen%");

SELECT name FROM artists WHERE genre = "Pop";

SELECT title FROM songs WHERE artist IN (SELECT name FROM artists
WHERE genre = "Pop");
```