CS W186 Introduction to Database Systems
Fall 2019 Josh Hug

# DIS 1

## 1 SQL Potpourri

Write SQL queries to accomplish each task below. You will not need to join any tables. Assume you have access to tables with the following schemas, where each primary key is in all-caps:

- Songs(SONG_ID, song_name, album_id, weeks_in_top_40)
- Artists(ARTIST_ID, artist_name, first_yr_active)
- Albums(ALBUM_ID, album_name, artist_id, yr_released, genre)

(a) Find the 5 songs that spent the fewest weeks in the top 40, ordered from least to most.

(b) Find the name and the first year active for every artist whose name starts with the letter 'B'.

(c) Find the total number of albums released per genre.

(d) Find the total number of albums released per genre. Don't include genres with a count less than 10.

(e) Find the genre for which the most albums were released in the year 2000.

**Solution:**

(a) Find the 5 songs that spent the fewest weeks in the top 40, ordered from least to most.

```
SELECT song_name
FROM Songs
ORDER BY weeks_in_top_40 ASC
LIMIT 5;
```

(b) Find the name and the first year active for every artist whose name starts with the letter 'B'.

```
SELECT artist_name, first_yr_active
FROM Artists
WHERE artist_name LIKE 'B%';
```

(c) Find the total number of albums released per genre.

```
SELECT genre, COUNT(album_id)
FROM Albums
GROUP BY genre;
```

(d) Find the total number of albums released per genre. Don't include genres with a count less than 10.

```
SELECT genre, COUNT(*)
FROM Albums
GROUP BY genre
HAVING COUNT(*) >= 10;
```

(e) Find the genre for which the most albums were released in the year 2000.

```
SELECT genre
FROM albums
WHERE yr_released = 2000
GROUP BY genre
ORDER BY COUNT(*) DESC
LIMIT 1;
```