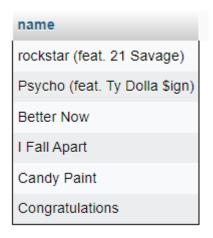
Database week 3 answers

1.1 Assignment 1

1. write a SQL query that lists the names of songs that are by Post Malone.

```
SELECT songs.name
FROM songs, artists
WHERE songs.artist_id = artists.id
AND artists.name = "Post Malone";
```



2. write a SQL query that returns the average energy of songs that are by Drake.

```
SELECT AVG(energy)
FROM songs, artists
WHERE songs.artist_id = artists.id
AND artists.name = "Drake";

AVG(energy)

0.599
```

1.2 Assignment 2

1. write a SQL query to list the titles and release years of all Harry Potter movies, in chronological order.

```
SELECT title, year
FROM movies
WHERE title like 'Harry Potter%'
ORDER BY year ASC
```

title	year	a 1
Harry Potter and the Sorcerer's Stone		2001
Harry Potter and the Chamber of Secrets		2002
Harry Potter and the Prisoner of Azkaban		2004
Harry Potter and the Goblet of Fire		2005
Harry Potter and the Order of the Phoenix		2007
Harry Potter and the Half-Blood Prince		2009
Harry Potter and the Deathly Hallows: Part 1		2010
Harry Potter and the Deathly Hallows: Part 2		2011
Harry Potter and the Untold Stories of Hogwarts		2012
Harry Potter and the Cursed Child		2016
Harry Potter: A History of Magic		2017

2. write a SQL query to determine the average rating of all movies released in 2012.

```
SELECT AVG(rating)
FROM ratings, movies
where ratings.movie_id = movies.id
AND movies.year = 2012
```

AVG(rating)
6.9

3. write a SQL query to list all movies released in 2010 and their ratings, in descending order by rating. For movies with the same rating, order them alphabetically by title.

SELECT title, rating FROM ratings, movies where ratings.movie_id = movies.id AND movies.year = 2010 ORDER BY rating DESC, title;

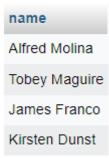


4. write a SQL query to list the names of all people who starred in Spider-man.

```
SELECT name
FROM movies, people, stars
WHERE movies.id = stars.movie_id
AND people.id = stars.person_id
AND movies.title = "Spider-man";
name
Tobey Maguire
Kirsten Dunst
Willem Dafoe
James Franco
```

5. write a SQL query to list the names of all people who starred in a movie released in 2004, ordered by birth year.

```
SELECT name
FROM movies, people, stars
WHERE movies.id = stars.movie_id
AND people.id = stars.person_id
AND movies.year = 2004
ORDER BY birth;
```



6. write a SQL query to list the names of all people who have directed a movie that received a rating of at least 8.0.

```
SELECT name
FROM movies, people, directors, ratings
WHERE movies.id = directors.movie_id
AND people.id = directors.person_id
AND ratings.movie_id = movies.id
AND ratings.rating >= 8.0
```



7. write a SQL query to list the titles of the five highest rated movies (in order) that Zendaya starred in, starting with the highest rated.

```
SELECT title
FROM movies, people, ratings, stars
WHERE movies.id = stars.movie_id
AND people.id = stars.person_id
AND ratings.movie_id = movies.id
AND people.name = "Zendaya"
ORDER BY ratings.rating DESC
LIMIT 5
```

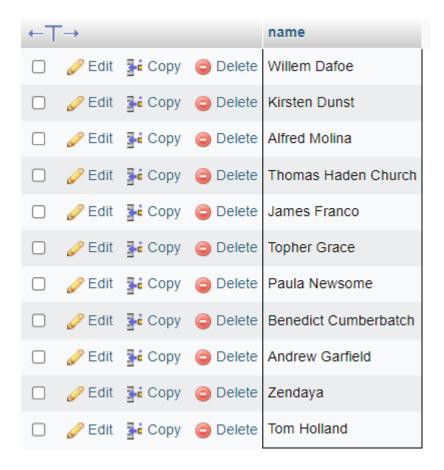
8. write a SQL query to list the titles of all movies in which both Tom Holland and Andrew Garfield starred.

```
SELECT movies.title FROM movies
WHERE movies.id IN (
    SELECT stars.movie_id FROM stars
```

```
WHERE stars.person_id IN (
        SELECT people.id FROM people
        WHERE people.name = "Tom Holland"
        OR people.name = "Andrew Garfield"
GROUP BY stars.movie_id
HAVING COUNT(stars.movie_id) = 2
SELECT movies.title FROM movies
WHERE movies.id IN (
SELECT stars.movie id FROM stars
   WHERE stars.person id IN (
        SELECT people.id FROM people
        WHERE people.name = "Tom Holland"
        ))
AND movies.id IN (
SELECT stars.movie id FROM stars
   WHERE stars.person id IN (
        SELECT people.id FROM people
        WHERE people.name = "Andrew Garfield"
        )
)
```

9. write a SQL query to list the names of all people who starred in a movie in which Tobey Maguire also starred.

```
SELECT people.name FROM people WHERE people.id IN
    (SELECT DISTINCT stars.person_id FROM stars WHERE stars.movie_id IN
         (SELECT stars.movie_id FROM stars WHERE stars.person_id IN
               (SELECT people.id FROM people WHERE name = 'Tobey Maguire'))
               AND stars.person_id NOT IN (SELECT people.id FROM people
WHERE name = 'Tobey Maguire'));
```



10. write a SQL query to find the actor who has the highest difference between their best and their worst rated movie

SELECT name, max(rating), min(rating), (max(rating)-min(rating)) as xxx FROM movies, stars, people, ratings WHERE movies.id = stars.movie_id AND stars.person_id = people.id AND movies.id = ratings.movie_id group by name order by xxx desc limit 1;

name	max(rating)	min(rating)	diff
Tobey Maguire	8.6	6.2	2.39999999999999

1.3 Assignment 3

-- Who the thief is: Bruce

-- Where the thief escaped to: Groningen-Eelde

-- The ACCOMPLICE is: Robin