Problem Set 7: Movies

Write SQL queries to answer questions about a database of movies.

Given Database: movies.db

List of Tables in movies.db Database:

- movies
- people
- directors
- stars
- ratings

Movies Table:

- id
- title
- year

id	title	year
1	Titanic	1997
2	Jurassic Park	1993
3	Finding Nemo	2003
...	...	...

People Table:

- id
- name
- birth

id	name	birth
1	Tom Hanks	1956
2	Andrew Stanton	1965
3	Natalie Portman	1981
4	Leonardo DiCaprio	1974
5	Ellen DeGeneres	1958
6	Steven Spielberg	1946
...	...	...

Directors Table:

- movie_id
- person_id

movie_id	person_id
3	2
2	6
...	...

Mapping of Movies and People Table:

movies

id	title	year
1	Titanic	1997
2	Jurassic Park	1993
3	Finding Nemo	2003
...	...	...

people

id	title	year
1	Tom Hanks	1956
2	Andrew Stanton	1965
3	Natalie Portman	1981
4	Leonardo DiCaprio	1974
5	Ellen DeGeneres	1958
6	Steven Spielberg	1946
...	...	...

directors

movie_id	person_id
3	2
2	6
...	...

Stars Table:

- movie_id
- person_id

movie_id	person_id
1	4
3	5
...	...

Mapping of Movies and People Table:

movies

id	title	year
1	Titanic	1997
2	Jurassic Park	1993
3	Finding Nemo	2003
...	...	...

people

id	title	year
1	Tom Hanks	1956
2	Andrew Stanton	1965
3	Natalie Portman	1981
4	Leonardo DiCaprio	1974
5	Ellen DeGeneres	1958
6	Steven Spielberg	1946
...	...	...

stars

movie_id	person_id
1	4
3	5
...	...

Ratings Table:

- movie_id
- rating
- votes

movie_id	rating	votes
1	7.8	976984
2	8.1	799848
3	8.1	886560
...	...	...

We can extract information from two different tables:

movies

id	title	year
1	Titanic	1997
2	Jurassic Park	1993
3	Finding Nemo	2003
...	...	...

ratings

movie_id	rating	votes
1	7.8	976984
2	8.1	799848
3	8.1	886560
...	...	...

To Do:

- For each question, write a single SQL query to answer the question.
- Query should output only the data that is asked for.
- Do not assume the values of any `id`s.

To test your query execute the following command with appropriate filename:

```
cat 1.sql | sqlite3 movies.db
```

Problem Set 7: Fiftyville

Write SQL queries to solve a mystery.

Given Database: fiftyville.db

Command to Write SQL Queries: sqlite3 fiftyville.db

What You Know

- Theft took place on July 28
- Theft took place on Chamberlin Street

Your Goal is to Identify

1. Who the thief is
2. Where the thief escaped to
3. Who the thief's accomplice was who helped them escape town

Database Tables:

```
sqlite> .tables

airports                  flights
atm_transactions          interviews
bank_accounts             passengers
courthouse_security_logs  people
crime_scene_reports       phone_calls
```

Schema of crime_scene_reports Table:

```
sqlite> .schema crime_scene_reports
CREATE TABLE crime_scene_reports (
    id INTEGER,
    year INTEGER,
    month INTEGER,
    day INTEGER,
    street TEXT,
    description TEXT
);
```

Example Query:

```
SELECT description
FROM crime_scene_reports
WHERE month = 7 AND day = 28
AND street = "Chamberlin Street";
```

Suggestions:

- Explore table schemas to understand what data is available and how tables connect to one another.
- To query across multiple tables, nest queries together or join multiple tables together.
- Maintain a list of suspects.

Reminder:

- Keep track of all queries you run in your log file, adding comments to take notes and to describe your thought process.