SQL-Lab – Aufgabenblatt 5 – SQL Statements

Allgemeine Informationen

Die SQL Statements dieses Aufgabenblattes bilden die Grundlage für Aufgabenblatt 5. Bitte führt sie in der angegebenen Reihenfolge aus, um die Datenbank eures späteren Programms aufzubauen.

SQL Statements

1
```sql
CREATE TABLE participations (
  actor VARCHAR(100) NOT NULL,
  movie VARCHAR(400) NOT NULL,
  movie_title VARCHAR(400) NOT NULL,
  PRIMARY KEY(actor, movie)
);
```

2
```sql
INSERT INTO participations (
  SELECT DISTINCT
    a.name_name,
    m.title_id,
    m.title_title
  FROM (
    SELECT * FROM imdb.actors
    UNION ALL
    SELECT * FROM imdb.actresses
  ) AS a
  JOIN imdb.movies AS m
    ON a.title_id = m.title_id
  WHERE m.title_year = 2008
    AND m.title_type = 'film'
);
```

3
```sql
CREATE TABLE actor_cooccurrence AS (
  SELECT DISTINCT
    p1.actor AS actor_from,
    p2.actor AS actor_to,
    p1.movie_title AS movie
  FROM participations AS p1
  JOIN participations AS p2
    ON p1.movie = p2.movie
  WHERE p1.actor <> p2.actor
)
DATA INITIALLY DEFERRED
REFRESH DEFERRED;
```

4
```sql
SET INTEGRITY FOR actor_cooccurrence
IMMEDIATE CHECKED NOT INCREMENTAL;
```

5
```sql
CREATE INDEX aco__actor_from
ON actor_cooccurrence (actor_from);
```

6
```sql
CREATE INDEX aco__actor_to
ON actor_cooccurrence (actor_to);
```

7
```sql
WITH himself(name, num) AS (
  VALUES('Ledger, Heath', 0)
),
first_grade(name, num, actor1, title1) AS (
  SELECT DISTINCT
    actor_to, 1, actor_from, movie
  FROM actor_cooccurrence
  WHERE actor_from
        IN (SELECT name FROM himself)
  UNION ALL
  (SELECT h.*, '', '' FROM himself h)
),
second_grade(
  name, num, actor1, title1, actor2, title2
) AS (
  SELECT DISTINCT
    actor_to, 2, actor1, title1,
    actor_from, movie
  FROM first_grade AS f
  JOIN actor_cooccurrence
    ON actor_from = f.name
  UNION ALL
  (SELECT f.*, '', '' FROM first_grade AS f)
),
third_grade(
  name, num, actor1, title1, actor2, title2,
  actor3, title3
) AS (
  SELECT DISTINCT
    actor_to, 3, actor1, title1,
    actor2, title2, actor_from, movie
  FROM actor_cooccurrence
  JOIN second_grade AS s
    ON actor_from = s.name
  UNION ALL
  (SELECT s.*,'','' FROM second_grade AS s)
)
SELECT DISTINCT
  name, num, actor1, title1, actor2, title2,
  actor3, title3
FROM third_grade
WHERE name = 'Depp, Johnny'
ORDER BY num ASC;
```