

Slide Deck: Solving the IMDb Movies Problem Set

Slide 1: Welcome!

Title: Querying IMDb Movies with SQL

By: TA's @ Projectstake Academy

Slide 2: The Database

Tables in movies.db:

- **movies** → id, title, year
 - **people** → id, name, birth
 - **ratings** → movie_id, rating, votes
 - **stars** → movie_id, person_id
 - **directors** → movie_id, person_id
-

Slide 3: Question 1 – Movies from 2008

```
SELECT title  
FROM movies  
WHERE year = 2008;
```

Slide 4: Question 2 – Emma Stone's Birth Year

```
SELECT birth  
FROM people  
WHERE name = 'Emma Stone';
```

Slide 5: Question 3 – Movies Released 2018+

```
SELECT title  
FROM movies  
WHERE year >= 2018  
ORDER BY title;
```

Slide 6: Question 4 – Number of Movies Rated 10.0

```
SELECT COUNT(*)  
FROM ratings  
WHERE rating = 10.0;
```

Slide 7: Question 5 – Harry Potter Movies

```
SELECT title, year  
FROM movies  
WHERE title LIKE 'Harry Potter%'  
ORDER BY year;
```

Slide 8: Question 6 – Average Rating of 2012 Movies

```
SELECT AVG(rating)  
FROM ratings  
JOIN movies ON ratings.movie_id = movies.id  
WHERE movies.year = 2012;
```

Slide 9: Question 7 – Movies from 2010 with Ratings

```
SELECT title, rating  
FROM movies  
JOIN ratings ON ratings.movie_id = movies.id  
WHERE year = 2010  
ORDER BY rating DESC, title;
```

Slide 10: Question 8 – Stars of *Toy Story*

```
SELECT name  
FROM people  
WHERE id IN (  
    SELECT person_id  
    FROM stars  
    WHERE movie_id = (  
        SELECT id  
        FROM movies  
        WHERE title = 'Toy Story'  
    )  
);
```

Slide 11: Question 9 – Stars of Movies Released in 2004

```
SELECT DISTINCT name  
FROM people
```

```
WHERE id IN (
    SELECT person_id
    FROM stars
    WHERE movie_id IN (
        SELECT id
        FROM movies
        WHERE year = 2004
    )
)
ORDER BY birth;
```

Slide 12: Question 10 – Directors of 9.0+ Movies

```
SELECT DISTINCT name
FROM people
WHERE id IN (
    SELECT person_id
    FROM directors
    WHERE movie_id IN (
        SELECT movie_id
        FROM ratings
        WHERE rating >= 9.0
    )
);
```

Slide 13: Question 11 – Chadwick Boseman's Top 5 Movies

```
SELECT title
FROM movies
JOIN stars ON movies.id = stars.movie_id
```

```
JOIN people ON stars.person_id = people.id  
JOIN ratings ON movies.id = ratings.movie_id  
WHERE people.name = 'Chadwick Boseman'  
ORDER BY ratings.rating DESC  
LIMIT 5;
```

Slide 14: Question 12 – Movies with Bradley Cooper & Jennifer Lawrence

```
SELECT title  
FROM movies  
WHERE id IN (  
    SELECT movie_id  
    FROM stars  
    WHERE person_id = (  
        SELECT id FROM people WHERE name = 'Bradley Cooper'  
    )  
    INTERSECT  
    SELECT movie_id  
    FROM stars  
    WHERE person_id = (  
        SELECT id FROM people WHERE name = 'Jennifer Lawrence'  
    )  
);
```

Slide 15: Question 13 – Stars in Movies with Kevin Bacon (1958)

```
SELECT DISTINCT name  
FROM people  
WHERE id IN (
```

```
SELECT person_id
FROM stars
WHERE movie_id IN (
    SELECT movie_id
    FROM stars
    WHERE person_id = (
        SELECT id FROM people
        WHERE name = 'Kevin Bacon' AND birth = 1958
    )
)
AND name != 'Kevin Bacon';
```

Slide 15: The End!

Thanks for learning with us! Keep exploring CS50x with Us!.
