

# Slide Deck: Solving the IMDb Movies Problem Set

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## Slide 1: Welcome!

**Title:** Querying IMDb Movies with SQL

**By:** TA's @ Projectstake Academy

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## 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
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## Slide 3: Question 1 – Movies from 2008

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

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

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

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**Slide 5: Question 3 – Movies Released 2018+**

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

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**Slide 6: Question 4 – Number of Movies Rated 10.0**

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

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**Slide 7: Question 5 – Harry Potter Movies**

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

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**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;
```

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**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;
```

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**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'
    )
);
```

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**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;
```

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#### 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  
    )  
);
```

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#### 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;
```

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#### 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'
)
);
```

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#### 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';
```

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**Slide 15: The End!**

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

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