

Achievement 3.4

Query

Query History

1

2

SELECT

film_id, title

FROM

film

Data output

Messages

Notifications

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⬇️

QUERY PLAN

text

🔒

1

Seq Scan on film (cost=0.00..64.00 rows=1000 width=19)

Total rows: 1 of 1

Query complete 00:00:00.044

Query

Query History

1

2

3

EXPLAIN

SELECT *

FROM

film

Data output

Messages

Notifications

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QUERY PLAN

text

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1

Seq Scan on film (cost=0.00..64.00 rows=1000 width=388)

Total rows: 1 of 1

Query complete 00:00:00.098

Both Queries has the same cost but the one with only two columns needed less time to compute than the one that shows all the column. Time to complete a query can be a main factor because more time means more money for labor.

2)

| Query | Query History |
|-------|--|
| 1 | SELECT * |
| 2 | FROM film |
| 3 | ORDER BY title ASC , release_year ASC , rental_rate DESC |

<https://drive.google.com/file/d/1xHd5wCB0AWbvm8EqNJl6MzUV8uG9eHja/view?usp=sharing>

3)

| Query | Query History |
|-------|--|
| 1 | SELECT rating, AVG (rental_rate) |
| 2 | FROM film |
| 3 | GROUP BY rating |

<https://drive.google.com/file/d/1CuDyMNMB0CSyniF0GIluclqlqgrx3nWS/view?usp=sharing>

| Query | Query History |
|-------|--|
| 1 | SELECT rating, MIN (rental_duration), MAX (rental_duration) |
| 2 | FROM film |
| 3 | GROUP BY rating |

<https://drive.google.com/file/d/1W7lJdude9ZmVSt-R0wByOpbSTkAyLPHY/view?usp=sharing>

4)

The procedure of migrating the data is called ETL (Extract, Transform, Load) by an engineer. Firstly is to collect the data, then convert into the data format same as the next database. At last, a completed transformed data will be loaded into the database.

If data is analyzed before loading into the data warehouse, previous data format might be invalid to the new system and cause confusion after data is transferred. Also, data set might be corrupted and ruin the whole data warehouse.