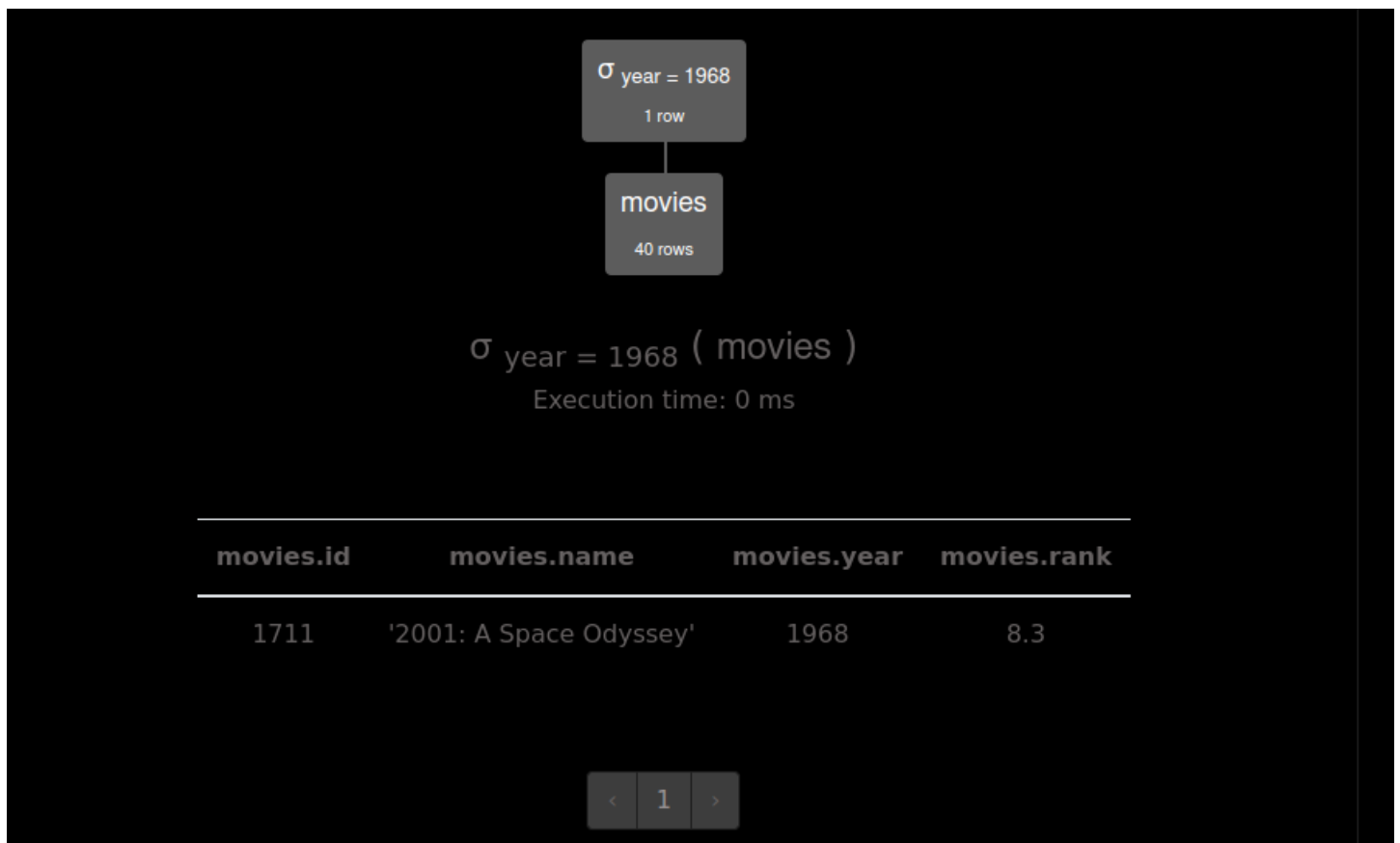


ÁLGEBRA RELACIONAL

DANILLO ARAÚJO DE PAIVA

* Filmes do Ano de 1968: $\sigma_{\text{year} = 1968}(\text{movies})$



The interface displays a query execution plan for the selection query $\sigma_{\text{year} = 1968}(\text{movies})$. The plan shows a selection operation (1 row) connected to a table scan operation (40 rows) on the 'movies' table. Below the plan, the query text and execution time are shown.

$\sigma_{\text{year} = 1968}(\text{movies})$
Execution time: 0 ms

movies.id	movies.name	movies.year	movies.rank
1711	'2001: A Space Odyssey'	1968	8.3

Navigation: < 1 >

* Filmes de Rank menor que 5: σ rank < 5 (movies)

σ rank < 5
3 rows

movies
40 rows

σ rank < 5 (movies)
Execution time: 1 ms

movies.id	movies.name	movies.year	movies.rank
256530	'Piranha Part Two: The Spawning'	1981	2.8
369522	'Xenogenesis'	1978	3.9
223710	'My Best Friend's Birthday'	1987	3.9

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* Diretores com o nome Stanley: σ first_name = 'Stanley' (directors)

σ first_name = 'Stanley'
1 row

directors
3 rows

σ first_name = 'Stanley' (directors)
Execution time: 1 ms

directors.id	directors.first_name	directors.last_name
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43095	'Stanley'	'Kubrick'
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* Atores do Gênero Feminino: σ gender = 'F' (actors)

σ gender = 'F'
289 rows

actors
1091 rows

σ gender = 'F' (actors)
Execution time: 0 ms

actors.id	actors.first_name	actors.last_name	actors.gender
589318	'Paula'	'Cross'	'F'
636502	'Wendy'	'Gordon'	'F'
712889	'Mary Elizabeth'	'Mastrantonio'	'F'
785706	'Kimberly (I)'	'Scott'	'F'
840493	'Emily'	'Yancy'	'F'
583693	'Barbara'	'Coles'	'F'
583735	'Valerie'	'Colgan'	'F'
596318	'Holly'	'De Jong'	'F'
635153	'Jenette'	'Goldstein'	'F'
651551	'Carrie'	'Henn'	'F'

* Atores do Gênero Feminino e nome Anne: σ gender = 'F' and first_name = 'Anne' (actors)

σ gender = 'F' and first_name = 'Anne'
3 rows

actors
1091 rows

σ gender = 'F' and first_name = 'Anne' (actors)
Execution time: 1 ms

actors.id	actors.first_name	actors.last_name	actors.gender
756625	'Anne'	'Pollack'	'F'
621016	'Anne'	'Fletcher'	'F'
662905	'Anne'	'Jackson'	'F'

* Atores do Gênero Masculino e sobrenome Campbell: σ gender = 'M' and last_name = 'Campbell' (actors)

σ gender = 'M' and last_name = 'Campbell'

2 rows

actors

1091 rows

σ gender = 'M' and last_name = 'Campbell' (actors)

Execution time: 0 ms

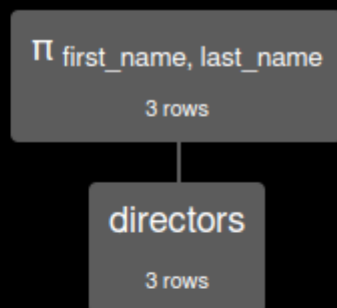
actors.id	actors.first_name	actors.last_name	actors.gender
70419	'J. Kenneth'	'Campbell'	'M'
70489	'Lindsay (I)'	'Campbell'	'M'

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* Nome e Sobrenome dos Diretores: π first_name, last_name (directors)



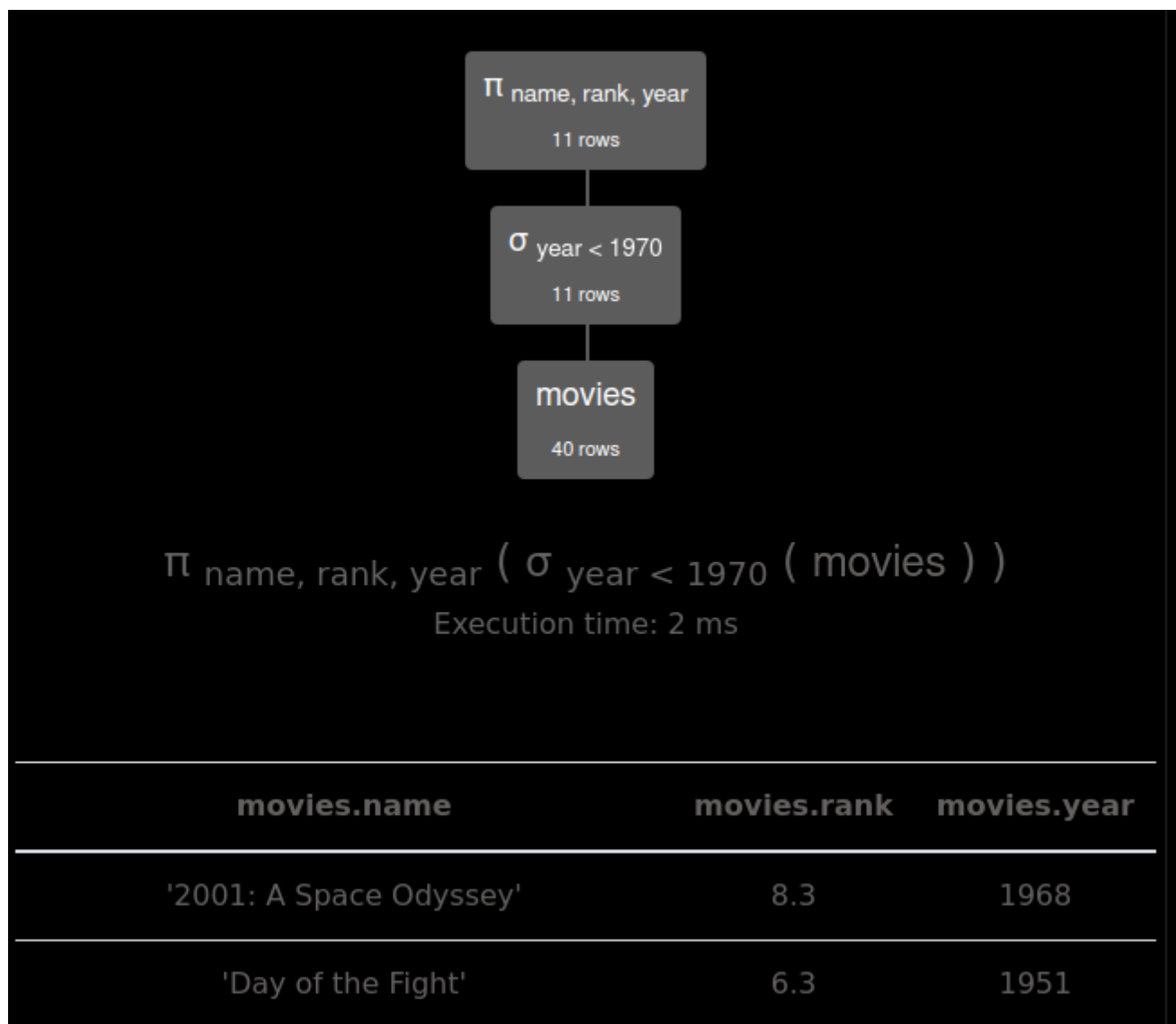
π first_name, last_name (directors)
Execution time: 3 ms

directors.first_name	directors.last_name
'James (I)'	'Cameron'
'Stanley'	'Kubrick'
'Quentin'	'Tarantino'

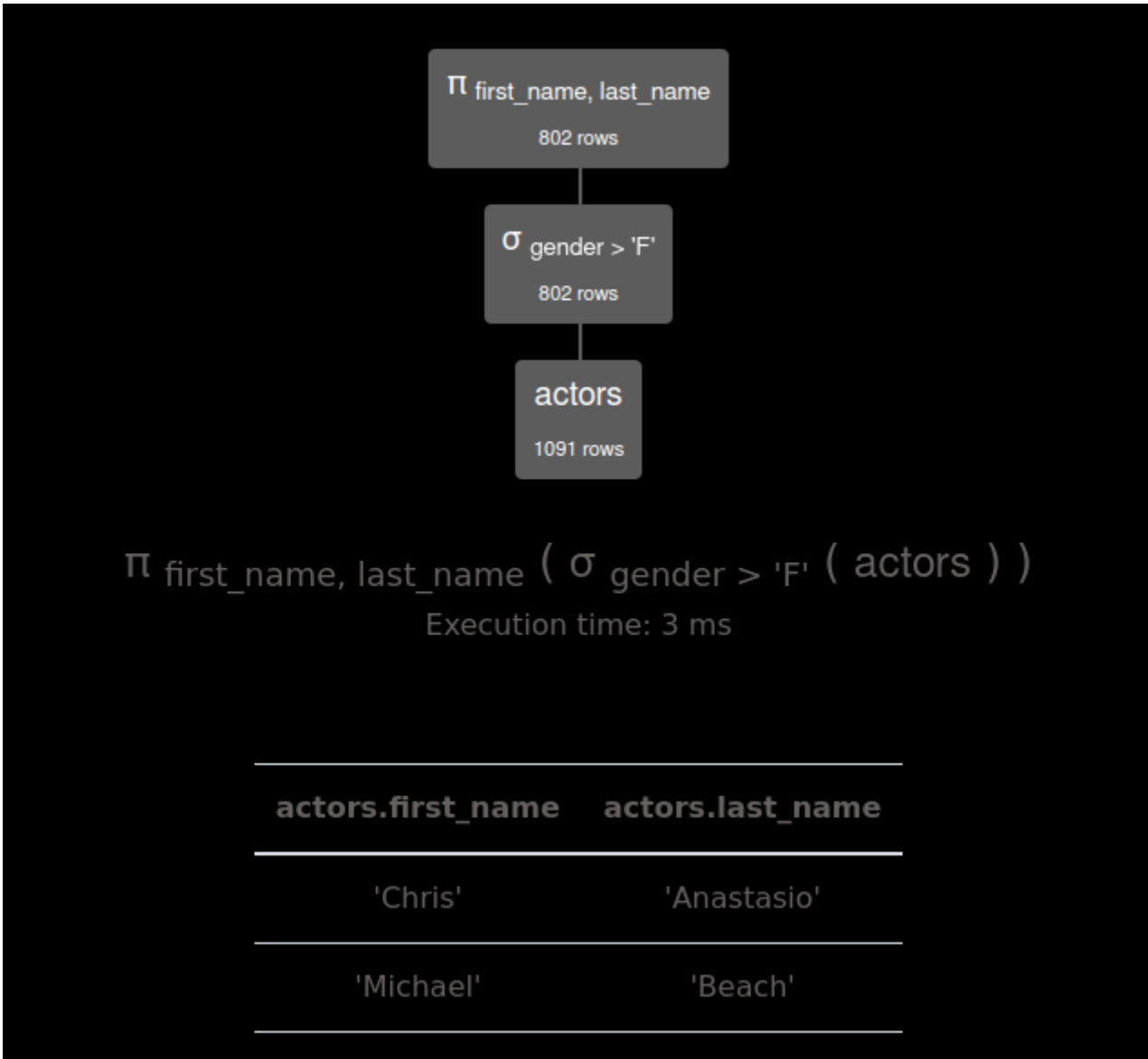
* Nome e Sobrenome e Gênero dos Atores: π first_name, last_name, gender (actors)



* Nome, Rank e Ano dos Filmes cujo o ano é menor que 1970: π name, rank, year (σ year < 1970 (movies))



* Nome e Sobrenome dos Atores cujo o gênero é feminino: π first_name, last_name (σ gender > 'F' (actors))



* Nome, Ano e Rank dos Filmes cujo o rank é maior que 7,5: π name, year, rank (σ rank ≥ 7.5 (movies))

