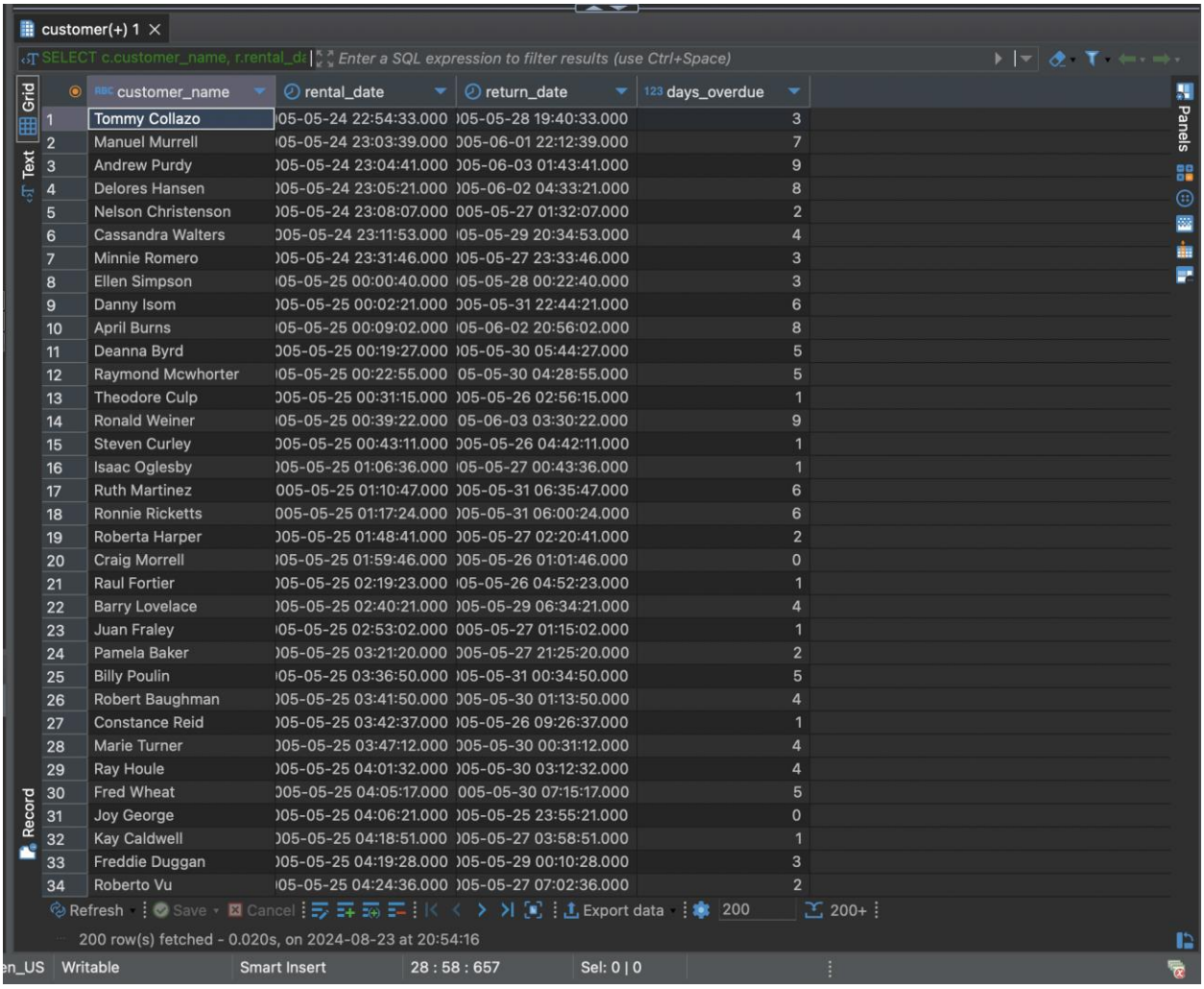
Pada skema dvdrental

1. Dapatkan nama customers dan waktu pengembalian untuk semua transaksi yang melebihi batas waktu pengembalian (7 hari)

```
-- 1---
ALTER TABLE customer
ADD COLUMN customer_name VARCHAR(255);

UPDATE customer
SET customer_name = CONCAT(first_name, ' ', last_name);

select * from customer c ;

SELECT c.customer_name, r.rental_date, r.return_date,
    DATE_PART('day', r.return_date - r.rental_date) AS days_overdue
FROM customer c
JOIN rental r ON c.customer_id = r.customer_id;
```

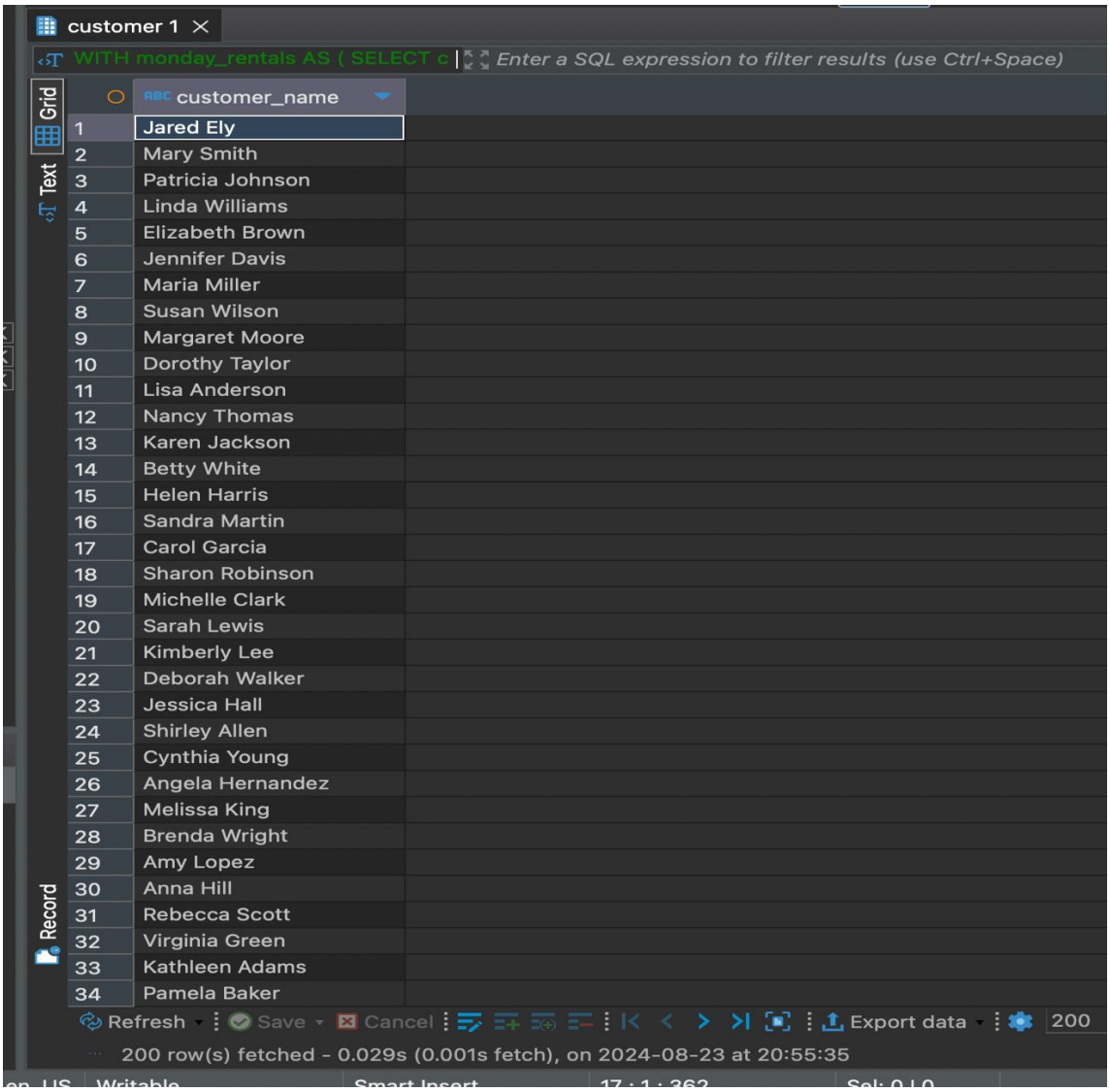
Output :



2. Tampilkan nama pelanggan yang melakukan transaksi peminjaman lebih dari sekali pada hari Senin! Gunakan CTE!

```sql
-- 2 ---
WITH monday_rentals AS (
  SELECT customer_id, COUNT(*) AS num_rentals
  FROM rental
  WHERE EXTRACT(DOW FROM rental_date) = 1  -- 1 = Monday
  GROUP BY customer_id
  HAVING COUNT(*) > 1
)
SELECT c.customer_name
FROM customer c
JOIN monday_rentals mr ON c.customer_id = mr.customer_id;
```

Output:

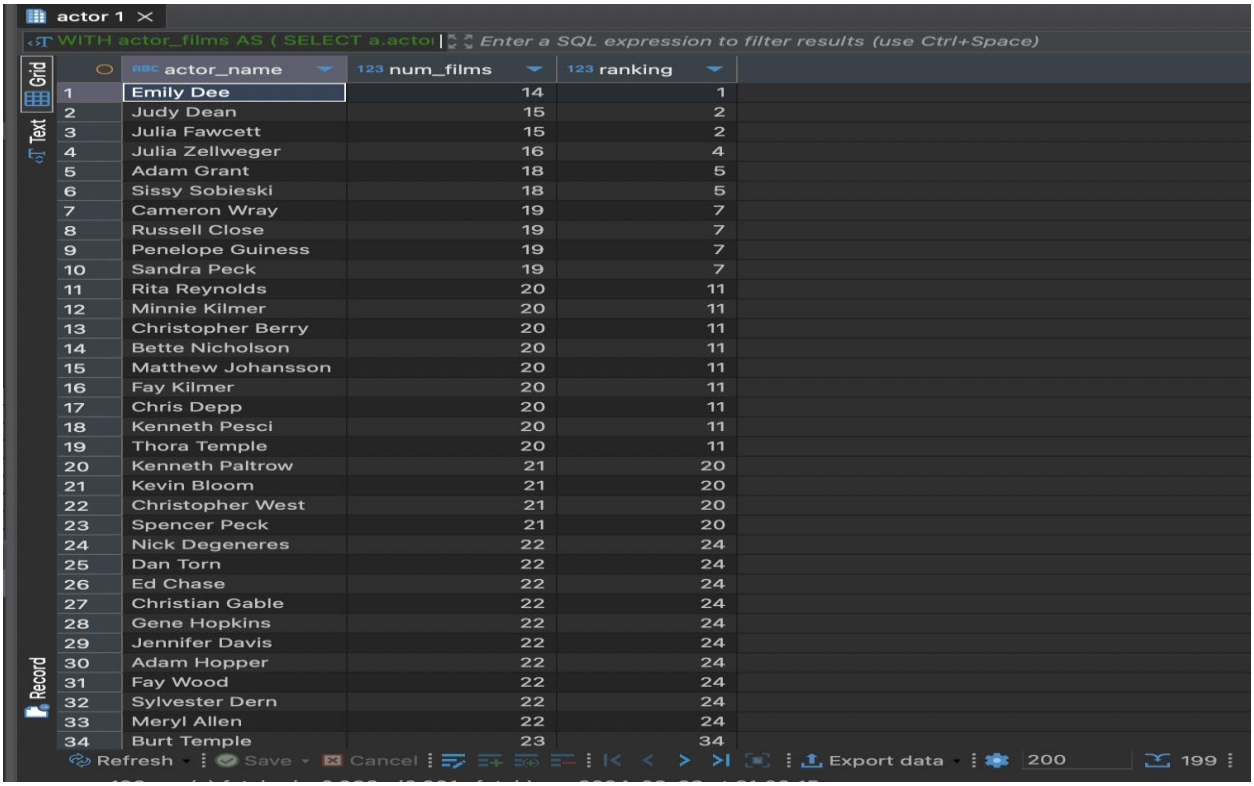


3. Temukan nama aktor dan jumlah film yang dia mainkan, serta peringkat aktor berdasarkan jumlah film. Urutkan berdasarkan peringkat secara ascending. Gunakan RANK!

```sql
-- 3 ---
ALTER TABLE actor
ADD COLUMN actor_name VARCHAR(255);

UPDATE actor
SET actor_name = CONCAT(first_name, ' ', last_name);

select * from actor a ;

WITH actor_films AS (
  SELECT a.actor_name, COUNT(f.film_id) AS num_films
```

```
  FROM actor a
  JOIN film_actor fa ON a.actor_id = fa.actor_id
  JOIN film f ON fa.film_id = f.film_id
  GROUP BY a.actor_name
)
SELECT actor_name, num_films,
      RANK() OVER (ORDER BY num_films ASC) AS ranking
FROM actor_films
ORDER BY ranking ASC;
```

Output:



actor 1

WITH actor_films AS (SELECT a.actor

Enter a SQL expression to filter results (use Ctrl+Space)

	actor_name	num_films	ranking
1	Emily Dee	14	1
2	Judy Dean	15	2
3	Julia Fawcett	15	2
4	Julia Zellweger	16	4
5	Adam Grant	18	5
6	Sissy Sobieski	18	5
7	Cameron Wray	19	7
8	Russell Close	19	7
9	Penelope Guiness	19	7
10	Sandra Peck	19	7
11	Rita Reynolds	20	11
12	Minnie Kilmer	20	11
13	Christopher Berry	20	11
14	Bette Nicholson	20	11
15	Matthew Johansson	20	11
16	Fay Kilmer	20	11
17	Chris Depp	20	11
18	Kenneth Pesci	20	11
19	Thora Temple	20	11
20	Kenneth Paltrow	21	20
21	Kevin Bloom	21	20
22	Christopher West	21	20
23	Spencer Peck	21	20
24	Nick Degeneres	22	24
25	Dan Torn	22	24
26	Ed Chase	22	24
27	Christian Gable	22	24
28	Gene Hopkins	22	24
29	Jennifer Davis	22	24
30	Adam Hopper	22	24
31	Fay Wood	22	24
32	Sylvester Dern	22	24
33	Meryl Allen	22	24
34	Burt Temple	23	34

Refresh Save Cancel Export data 200 199

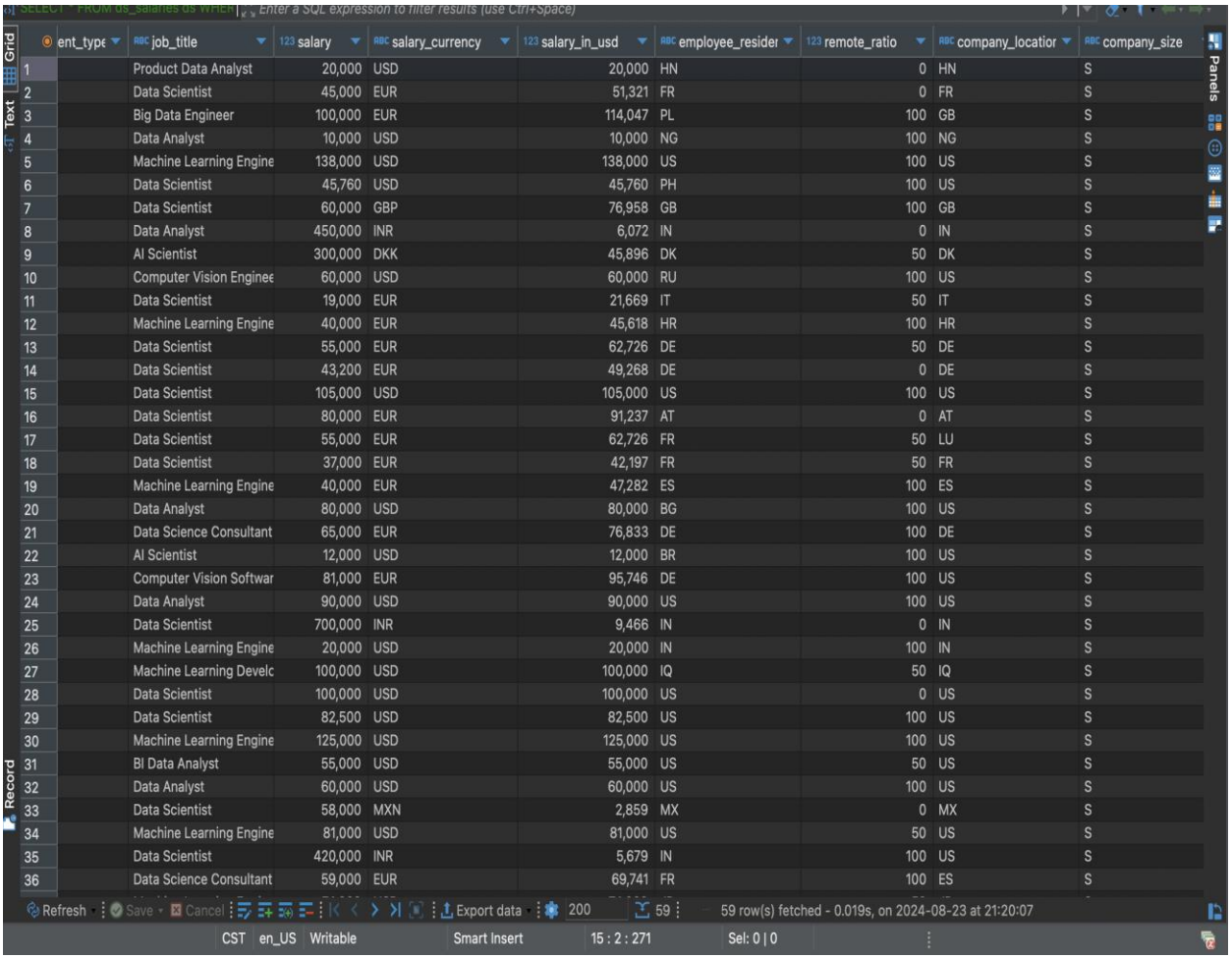
Pada skema DS Salaries

4. Tampilkan (semua kolom) dengan job_title yang memiliki salary_in_usd lebih besar dari rata-rata salary dari seluruh job_title. Namun, tampilkan hanya company_size = S.

```
-- 4 --
select * from ds_salaries ds ;

SELECT *
FROM ds_salaries ds
WHERE company_size = 'S'
AND job_title IN (
```

```
SELECT job_title
FROM ds_salaries ds2
GROUP BY job_title
HAVING AVG(salary_in_usd) < (
  SELECT AVG(salary_in_usd)
  FROM ds_salaries ds3
)
)
```

Output:



	ent_type	job_title	salary	salary_currency	salary_in_usd	employee_resider	remote_ratio	company_locatior	company_size
1		Product Data Analyst	20,000	USD	20,000	HN	0	HN	S
2		Data Scientist	45,000	EUR	51,321	FR	0	FR	S
3		Big Data Engineer	100,000	EUR	114,047	PL	100	GB	S
4		Data Analyst	10,000	USD	10,000	NG	100	NG	S
5		Machine Learning Engine	138,000	USD	138,000	US	100	US	S
6		Data Scientist	45,760	USD	45,760	PH	100	US	S
7		Data Scientist	60,000	GBP	76,958	GB	100	GB	S
8		Data Analyst	450,000	INR	6,072	IN	0	IN	S
9		AI Scientist	300,000	DKK	45,896	DK	50	DK	S
10		Computer Vision Enginee	60,000	USD	60,000	RU	100	US	S
11		Data Scientist	19,000	EUR	21,669	IT	50	IT	S
12		Machine Learning Engine	40,000	EUR	45,618	HR	100	HR	S
13		Data Scientist	55,000	EUR	62,726	DE	50	DE	S
14		Data Scientist	43,200	EUR	49,268	DE	0	DE	S
15		Data Scientist	105,000	USD	105,000	US	100	US	S
16		Data Scientist	80,000	EUR	91,237	AT	0	AT	S
17		Data Scientist	55,000	EUR	62,726	FR	50	LU	S
18		Data Scientist	37,000	EUR	42,197	FR	50	FR	S
19		Machine Learning Engine	40,000	EUR	47,282	ES	100	ES	S
20		Data Analyst	80,000	USD	80,000	BG	100	US	S
21		Data Science Consultant	65,000	EUR	76,833	DE	100	DE	S
22		AI Scientist	12,000	USD	12,000	BR	100	US	S
23		Computer Vision Softwar	81,000	EUR	95,746	DE	100	US	S
24		Data Analyst	90,000	USD	90,000	US	100	US	S
25		Data Scientist	700,000	INR	9,466	IN	0	IN	S
26		Machine Learning Engine	20,000	USD	20,000	IN	100	IN	S
27		Machine Learning Develc	100,000	USD	100,000	IQ	50	IQ	S
28		Data Scientist	100,000	USD	100,000	US	0	US	S
29		Data Scientist	82,500	USD	82,500	US	100	US	S
30		Machine Learning Engine	125,000	USD	125,000	US	100	US	S
31		BI Data Analyst	55,000	USD	55,000	US	50	US	S
32		Data Analyst	60,000	USD	60,000	US	100	US	S
33		Data Scientist	58,000	MXN	2,859	MX	0	MX	S
34		Machine Learning Engine	81,000	USD	81,000	US	50	US	S
35		Data Scientist	420,000	INR	5,679	IN	100	US	S
36		Data Science Consultant	59,000	EUR	69,741	FR	100	ES	S