AS_DS27_Day 13_Miranda Khairunnisa

Question 1

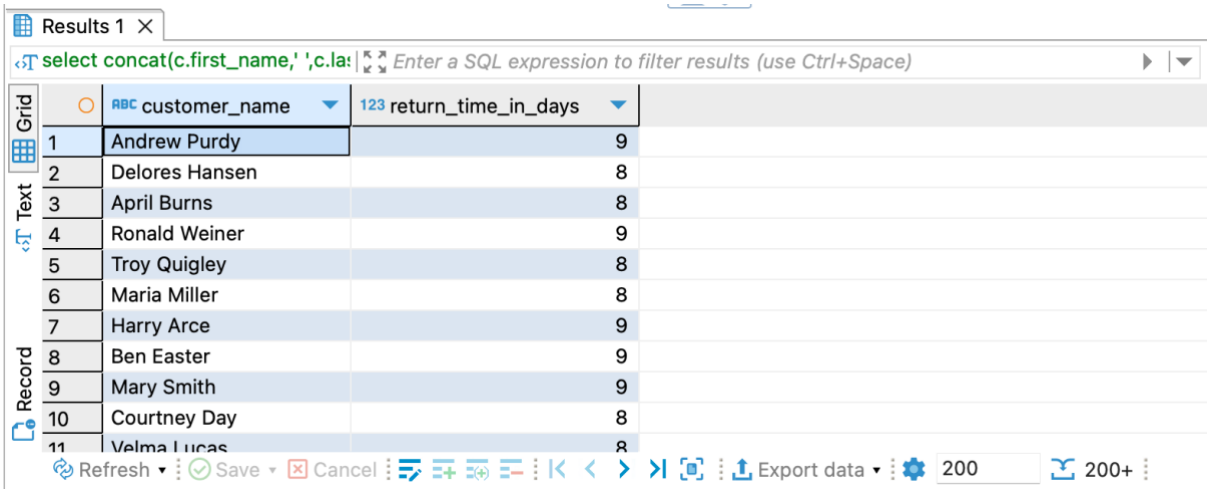
Pada skema dvdrental, dapatkan nama lengkap customers dan waktu pengembalian untuk semua transaksi yang melebihi batas waktu pengembalian (7 hari).

In the dvdrental scheme, get customer full names and return times for all transactions that exceed the return time limit (7 days).

```
select concat(c.first_name,' ',c.last_name) as customer_name,
        date_part('day',r.return_date - r.rental_date) as return_time_in_days
from customer c
join rental r
on c.customer_id = r.customer_id
where date_part('day',r.return_date - r.rental_date) > 7;
```

Extra note: datediff tidak berlaku di PostgreSQL.

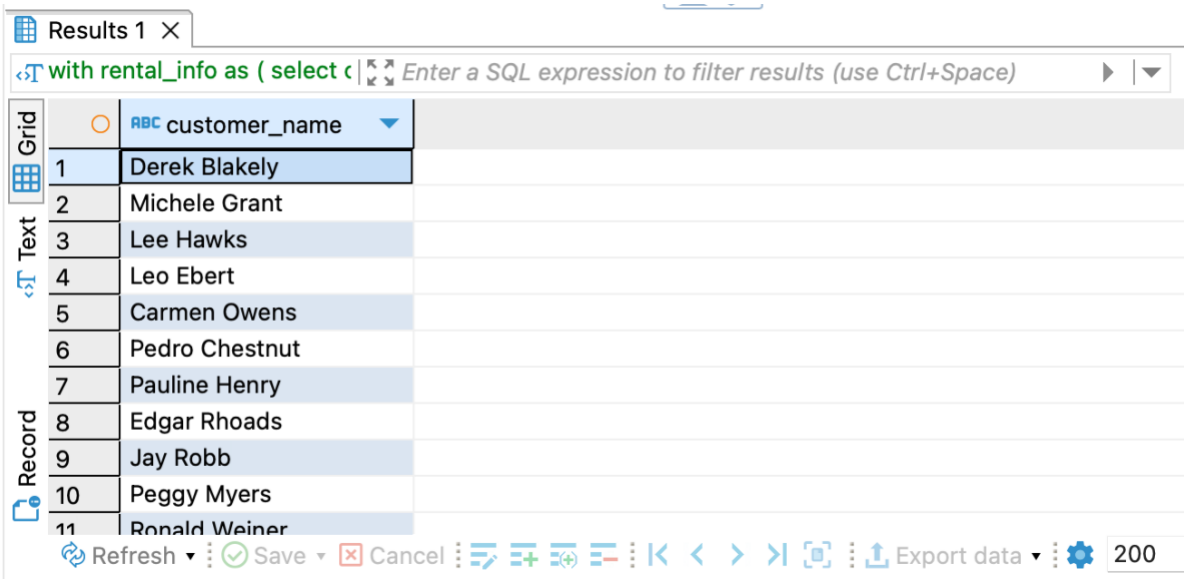
Ref: https://www.sqlines.com/postgresql/how-to/datediff



Question 2
Pada skema dvdrental, tampilkan nama pelanggan yang melakukan transaksi peminjaman lebih dari sekali pada hari Senin! Gunakan CTE!
In the dvdrental scheme, display the names of customers who made rental transactions more than once on Monday! Use CTEs!

```
-- CTE yang digunakan beberapa hal berikut:
-- menggabungkan nama customer
-- extract day of the week (Monday hari ke 1)
-- membuat case kalau rental Monday itu jadi 1, kalau di hari lain jadi 0
-- menjumlahkan dengan sum dan group by berapa kali rental di hari Monday
with rental_info as (
	select concat(c.first_name,' ',c.last_name) as customer_name,
		sum(case when (extract(dow from r.rental_date) = 1) then 1
			else 0
			end) as monday_rentals
	from rental r
	join customer c
	on r.customer_id = c.customer_id
	group by concat(c.first_name,' ',c.last_name)
	)
select customer_name
from rental_info
where monday_rentals > 1;
```

Extracting Day of Week from PostgreSQL:
Ref: https://www.geeksforgeeks.org/how-to-extract-day-of-week-from-date-field-in-postgresql/

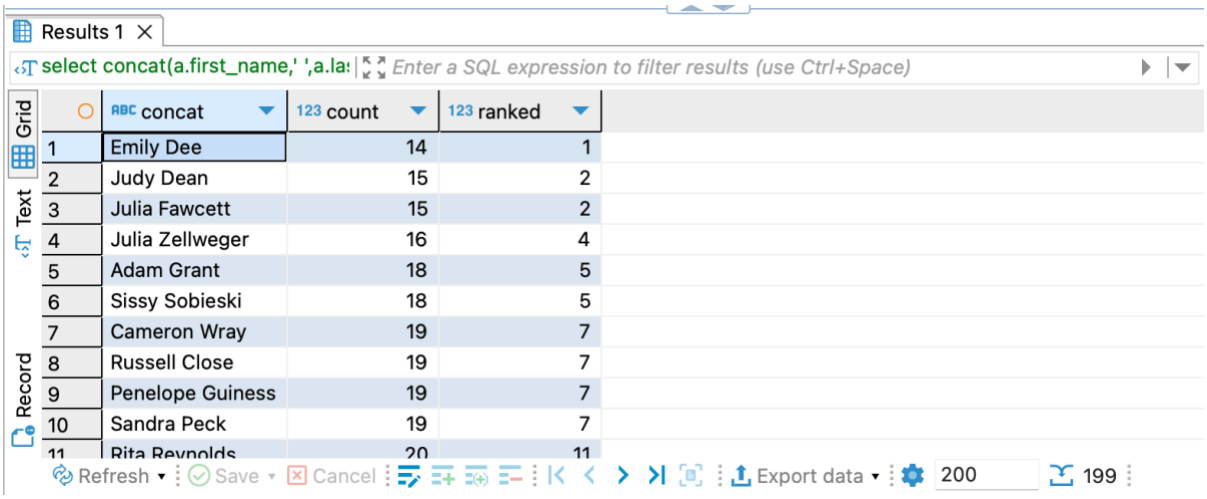

Results 1
with rental_info as (select c
Enter a SQL expression to filter results (use Ctrl+Space)
Grid
Text
Record
customer_name
1 Derek Blakely
2 Michele Grant
3 Lee Hawks
4 Leo Ebert
5 Carmen Owens
6 Pedro Chestnut
7 Pauline Henry
8 Edgar Rhoads
9 Jay Robb
10 Peggy Myers
11 Ronald Weiner
Refresh
Save
Cancel
Export data
200

Question 3

Pada skema dvdrental, temukan nama aktor dan jumlah film yang dia mainkan, serta peringkat actor berdasarkan jumlah film. Urutkan berdasarkan peringkat secara ascending. Gunakan RANK!

In the dvdrental scheme, find the actor's name and the number of films he appeared in, as well as the actor's ranking by number of films. Sort by rank in ascending order. Use RANK!

```
select concat(a.first_name,' ',a.last_name),
        count(fa.film_id),
        rank() over (order by count(fa.film_id) asc) as ranked
from actor a
join film_actor fa
on a.actor_id = fa.actor_id
group by concat(a.first_name,' ',a.last_name);
```

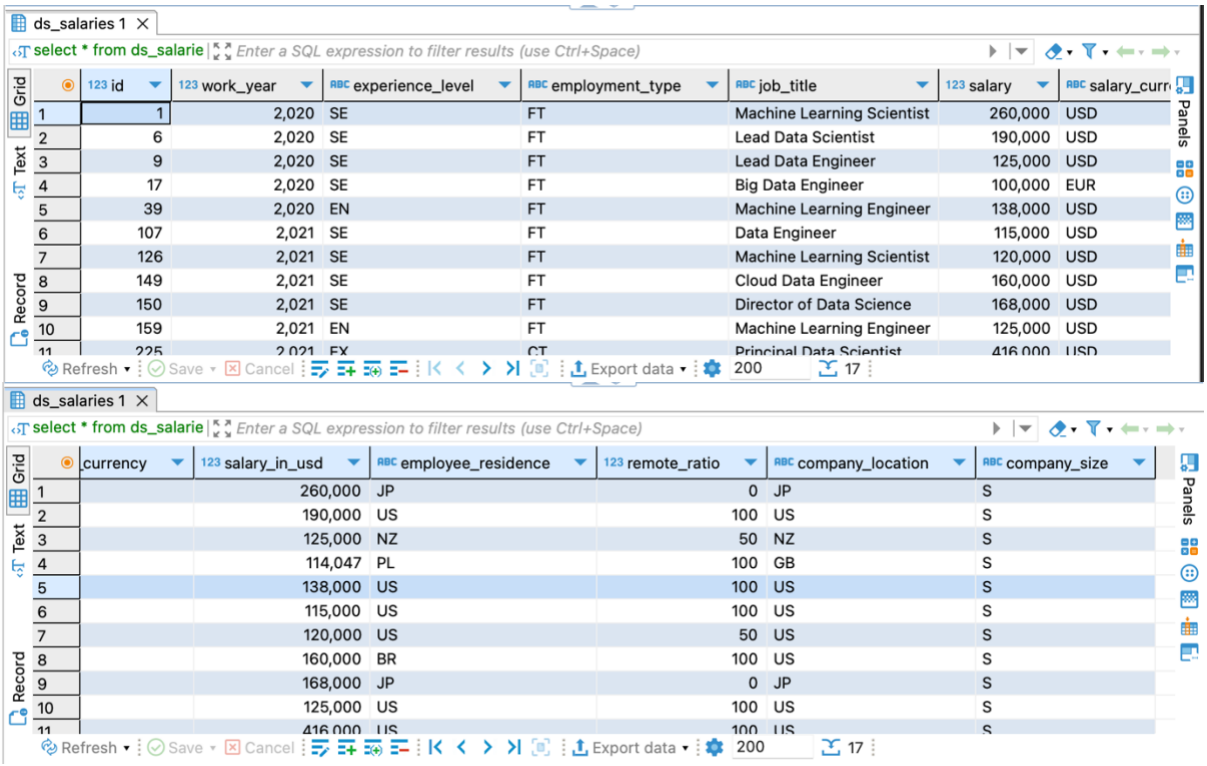


Question 4

Pada skema DS Salaries, 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.

In the DS Salaries scheme, display (all columns) with job_titles that have a salary_in_usd greater than the average salary of all job_titles. However, show only company_size = S.

```
select *
from ds_salaries d
where d.salary_in_usd > (select avg(d.salary_in_usd) from ds_salaries d)
        and d.company_size = 'S';
```



ds_salaries 1

select * from ds_salarie | Enter a SQL expression to filter results (use Ctrl+Space)

	id	work_year	experience_level	employment_type	job_title	salary	salary_curr
1	1	2,020	SE	FT	Machine Learning Scientist	260,000	USD
2	6	2,020	SE	FT	Lead Data Scientist	190,000	USD
3	9	2,020	SE	FT	Lead Data Engineer	125,000	USD
4	17	2,020	SE	FT	Big Data Engineer	100,000	EUR
5	39	2,020	EN	FT	Machine Learning Engineer	138,000	USD
6	107	2,021	SE	FT	Data Engineer	115,000	USD
7	126	2,021	SE	FT	Machine Learning Scientist	120,000	USD
8	149	2,021	SE	FT	Cloud Data Engineer	160,000	USD
9	150	2,021	SE	FT	Director of Data Science	168,000	USD
10	159	2,021	EN	FT	Machine Learning Engineer	125,000	USD
11	225	2,021	EX	CT	Principal Data Scientist	416,000	USD

Refresh | Save | Cancel | Export data | 200 | 17

ds_salaries 1

select * from ds_salarie | Enter a SQL expression to filter results (use Ctrl+Space)

	currency	salary_in_usd	employee_residence	remote_ratio	company_location	company_size
1		260,000	JP	0	JP	S
2		190,000	US	100	US	S
3		125,000	NZ	50	NZ	S
4		114,047	PL	100	GB	S
5		138,000	US	100	US	S
6		115,000	US	100	US	S
7		120,000	US	50	US	S
8		160,000	BR	100	US	S
9		168,000	JP	0	JP	S
10		125,000	US	100	US	S
11		416,000	US	100	US	S

Refresh | Save | Cancel | Export data | 200 | 17