SELECT ct.city, EXTRACT(MONTH FROM p.payment\_date) AS month, SUM(p.amount) AS total\_payment

FROM payment p

JOIN customer c ON p.customer\_id = c.customer\_id

JOIN address a ON c.address\_id = a.address\_id

JOIN city ct ON a.city\_id = ct.city\_id

GROUP BY ct.city, EXTRACT(MONTH FROM p.payment\_date)

--HAVING SUM(p.amount) > 31

ORDER BY city, month asc;

SELECT

title,

rental\_duration,

AVG(rental\_duration) OVER () as overall\_avg

FROM film;

SELECT DISTINCT avg(amount) OVER (PARTITION BY customer\_id, EXTRACT(MONTH FROM payment\_date)) , customer\_id,

avg(amount) OVER (PARTITION BY EXTRACT(MONTH FROM payment\_date)) as month\_average, EXTRACT(month FROM payment\_date) as month

FROM payment

ORDER BY customer\_id, month asc;

SELECT distinct avg(amount) OVER (PARTITION BY EXTRACT(MONTH FROM payment\_date), customer\_id) as cu\_average, customer\_id,

avg(amount) OVER (PARTITION BY EXTRACT(MONTH FROM payment\_date)) as month\_average, EXTRACT(month FROM payment\_date) as month

FROM payment

--group by customer\_id, month

ORDER BY customer\_id, month asc;

--doing the same as above but with CTE's

With customer\_month\_avg AS

(SELECT avg(amount) as cust\_month\_avg, customer\_id, EXTRACT(month FROM payment\_date) as month

FROM payment

GROUP BY customer\_id, month

ORDER BY customer\_id, month),

month\_avg AS (SELECT avg(amount) as month\_avg, EXTRACT(month FROM payment\_date) as month

FROM payment

GROUP BY EXTRACT(month FROM payment\_date))

SELECT c.cust\_month\_avg, c.customer\_id, c.month, m.month\_avg

FROM customer\_month\_avg c

JOIN month\_avg m ON m.month = c.month

WITH revenue\_vs\_month AS (

SELECT avg(amount) as month\_average, EXTRACT(month FROM payment\_date) as month

FROM payment

GROUP BY EXTRACT(month FROM payment\_date)

)

SELECT corr(month\_average, month)

FROM revenue\_vs\_month;

SELECT corr(month\_average, month)

FROM (SELECT avg(amount) as month\_average, EXTRACT(month FROM payment\_date) as month

FROM payment

GROUP BY EXTRACT(month FROM payment\_date));

WITH film\_rentals AS (

SELECT inventory.film\_id, COUNT(\*) AS rental\_count

FROM rental

JOIN inventory ON rental.inventory\_id = inventory.inventory\_id

GROUP BY inventory.film\_id

)

SELECT f.title, fr.rental\_count

FROM film f

JOIN film\_rentals fr ON f.film\_id = fr.film\_id

WHERE fr.rental\_count > 1;

WITH payment\_data as (

SELECT p.amount,return\_date - rental\_date AS time\_period, r.rental\_date, r.return\_date,

f.rental\_rate, f.rental\_duration, i.inventory\_id

FROM payment p

JOIN rental r ON r.rental\_id = p.rental\_id

JOIN inventory i ON r.inventory\_id = i.inventory\_id

JOIN film f ON i.film\_id = f.film\_id)

SELECT inventory\_id, amount, EXTRACT(day from time\_period) as days, EXTRACT(hour from time\_period) as hours, rental\_rate, rental\_duration

FROM payment\_data

WHERE EXTRACT(day from time\_period) = rental\_duration

ORDER BY inventory\_id

SELECT avg(rental\_count)

FROM (

SELECT customer\_id, COUNT(\*) AS rental\_count

FROM rental

GROUP BY customer\_id

) AS avg\_rental\_counts;

With test\_table as (

SELECT \*, CASE

WHEN rental\_rate > 1 THEN 'sadfasfsdfsdfsdf'

END as test\_column

FROM film )

SELECT title,test\_column, CASE

WHEN title not in (select test\_column from test\_table) THEN 'succes'

ELSE 'Not verified'

END

FROM test\_table