with temp\_film as (SELECT actor\_id, film\_id FROM film\_actor)

SELECT \*

FROM film\_actor

NATURAL JOIN temp\_film;

with actor\_2 as (select\*from actor)

SELECT \* FROM actor

CROSS JOIN actor\_2

WHERE actor\_2.first\_name <> actor.first\_name

SELECT customer\_id, first\_name, last\_name,

(SELECT COUNT(\*) FROM rental WHERE rental.customer\_id = customer.customer\_id) AS rental\_count

FROM customer;

SELECT max(rental\_count)

FROM (

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

FROM rental

GROUP BY customer\_id

) AS max\_count;

SELECT \*

FROM customer

WHERE customer\_id IN (

SELECT customer\_id

FROM rental

WHERE return\_date IS NULL

);

With date\_table AS

(SELECT Numb, Name

FROM (VALUES

(1, 'January'),

(2, 'February'),

(3, 'March'),

(4, 'April'),

(5, 'May')

) AS my\_table(Numb, Name))

--to convert number to name of month we could join with a table (using a CTE) or maybe built in formating?

SELECT ct.city, SUM(p.amount) AS total\_payment, date\_table.Name

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

JOIN date\_table ON EXTRACT(MONTH FROM p.payment\_date) = date\_table.Numb

GROUP BY ct.city, date\_table.Name

HAVING SUM(p.amount) > 31

ORDER BY ct.city DESC;

SELECT

title,

rental\_duration,

AVG(rental\_duration) OVER () AS overall\_average, STDDEV(rental\_duration) OVER () AS SD

FROM film;

SELECT amount, customer\_id,

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

FROM payment

WHERE EXTRACT(month FROM payment\_date) = 3

ORDER BY month desc;

WITH revenue\_vs\_month AS (

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

FROM payment

)

SELECT corr(month\_average, month)

FROM revenue\_vs\_month;

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;