-- 1 Задание

-- Основной запрос

SELECT

city,

CASE

WHEN age >= 0 AND age <= 20 THEN 'young'

WHEN age >= 21 AND age <= 49 THEN 'adult'

WHEN age >= 50 THEN 'old'

END AS age\_category,

COUNT(\*) AS customer\_count

FROM users

GROUP BY city, age\_category

ORDER BY city, customer\_count DESC, age\_category;

-- Задание 2

SELECT

category,

ROUND(AVG(price)::NUMERIC, 2) avg\_price

FROM products prds

WHERE LOWER(prds.name) LIKE '%hair%' OR LOWER(prds.name) LIKE '%home%'

GROUP BY prds.category;

-- В выборке учитываются две категории товаров, поскольку остальные товары под другими категориями не попали под LIKE

-- Задание 3

WITH sellers\_info AS (

SELECT

seller\_id,

COUNT(DISTINCT category) total\_categ,

ROUND(AVG(rating)::NUMERIC, 2) avg\_rating,

SUM(revenue) total\_revenue

FROM sellers

WHERE category != 'Bedding'

GROUP BY seller\_id

ORDER BY 1

), sellers\_by\_rich\_and\_poor AS (

SELECT

\*,

CASE

WHEN total\_categ > 1 AND total\_revenue > 50000 THEN 'rich'

WHEN total\_categ > 1 AND total\_revenue < 50000 THEN 'poor'

END seller\_type

FROM sellers\_info

)

SELECT \* FROM sellers\_by\_rich\_and\_poor

WHERE seller\_type IS NOT NULL;

-- 4 Задание

WITH sellers\_info AS (

SELECT

seller\_id,

COUNT(category) total\_categ,

ROUND(AVG(rating)::NUMERIC, 2) avg\_rating,

SUM(revenue) total\_revenue

FROM sellers

WHERE category != 'Bedding'

GROUP BY seller\_id

ORDER BY 1

), sellers\_by\_rich\_and\_poor AS (

SELECT

\*,

CASE

WHEN total\_categ > 1 AND total\_revenue > 50000 THEN 'rich'

WHEN total\_categ > 1 AND total\_revenue < 50000 THEN 'poor'

END seller\_type

FROM sellers\_info

), seller\_poors AS (

SELECT \*

FROM sellers

WHERE seller\_id IN (SELECT seller\_id FROM sellers\_by\_rich\_and\_poor WHERE seller\_type = 'poor')

)

-- Отчитываю от 25.10.2023

SELECT

seller\_id,

MAX(

FLOOR(

(to\_date('25/10/2023', 'DD/MM/YYYY') - to\_date(date\_reg, 'DD/MM/YYYY')) / 30

)

) month\_from\_registration,

(

SELECT MAX(delivery\_days) - MIN(delivery\_days) FROM seller\_poors

) max\_delivery\_difference

FROM seller\_poors

GROUP BY seller\_id

ORDER BY 1;

-- 5 Задание

WITH sellers\_info AS (

SELECT

seller\_id,

COUNT(category) total\_categ,

SUM(revenue) total\_revenue

FROM sellers

WHERE EXTRACT(YEAR FROM to\_date(date, 'DD/MM/YYYY')) = 2022

GROUP BY seller\_id

), sellers\_and\_categoryes AS (

SELECT seller\_id, category

FROM sellers

WHERE seller\_id IN (SELECT seller\_id FROM sellers\_info WHERE total\_categ = 2 AND total\_revenue > 75000) AND

EXTRACT(YEAR FROM to\_date(date, 'DD/MM/YYYY')) = 2022

ORDER BY 1, 2

)

SELECT seller\_id, STRING\_AGG(category, ' - ') AS category\_pair FROM sellers\_and\_categoryes GROUP BY seller\_id;