DROP TABLE IF EXISTS buyers;

CREATE table buyers (

id serial PRIMARY KEY,

first\_name varchar(50) NOT NULL,

last\_name varchar(50) NOT NULL

);

INSERT INTO buyers (last\_name, first\_name) VALUES

('Иванов', 'Иван'),

('Петров', 'Петр'),

('Шабанов', 'Леха'),

('Аксенов', 'Андрей'),

('Комозин', 'Максим'),

('Упрямов', 'Виталий'),

('Шишкин', 'Николай'),

('Суворов', 'Андрей'),

('Захаров', 'Макcим'),

('Карпухин', 'Дмитрий');

DROP TABLE IF EXISTS products;

CREATE table products (

id serial PRIMARY KEY,

product\_name varchar(100) NOT NULL,

price int NOT NULL

);

INSERT INTO products(product\_name, price) VALUES

('Минеральная вода', 50),

('Кока-кола', 100),

('Хлеб', 35),

('Батон', 40),

('Краковская колбаса', 250),

('Сок', 150),

('Молоко', 75),

('Чай', 120),

('Кофе', 400),

('Кефир', 80);

DROP TABLE IF EXISTS purchases;

CREATE TABLE purchases (

id serial,

buyers\_id int,

products\_id int,

date\_of\_buy Date NOT NULL,

FOREIGN KEY (buyers\_id) REFERENCES buyers (id),

FOREIGN KEY (products\_id) REFERENCES products (id)

);

INSERT INTO purchases(buyers\_id, products\_id, date\_of\_buy) VALUES

(1, 1, '2022-08-08'),

(2, 2, '2022-06-06'),

(1, 2, '2022-05-23'),

(3, 2, '2022-06-25'),

(1, 3, '2022-08-07');

INSERT INTO purchases(buyers\_id, products\_id, date\_of\_buy) VALUES

(4, 2, '2022-08-08'),

(2, 2, '2022-06-06'),

(6, 2, '2022-05-23'),

(5, 2, '2022-06-25'),

(4, 2, '2022-08-21'),

(4, 2, '2022-06-22'),

(4, 2, '2022-05-17'),

(4, 2, '2022-06-18'),

(6, 2, '2022-07-11'),

(6, 2, '2022-06-18'),

(6, 2, '2022-07-21'),

(6, 2, '2022-05-25');

INSERT INTO purchases(buyers\_id, products\_id, date\_of\_buy) VALUES

(8, 3, '2022-08-11'),

(8, 2, '2022-07-11'),

(8, 5, '2022-07-11'),

(8, 6, '2022-07-11'),

(8, 4, '2022-06-21'),

(8, 5, '2022-06-22'),

(8, 4, '2022-06-17'),

(8, 7, '2022-06-18'),

(8, 8, '2022-06-19'),

(8, 5, '2022-06-19'),

(7, 7, '2022-07-21'),

(7, 2, '2022-05-25');

INSERT INTO purchases(buyers\_id, products\_id, date\_of\_buy) VALUES

(9, 9, '2022-08-11'),

(9, 9, '2022-07-11'),

(9, 9, '2022-07-11'),

(9, 8, '2022-07-11'),

(7, 8, '2022-06-21'),

(7, 5, '2022-06-22'),

(7, 4, '2022-06-17'),

(7, 7, '2022-06-18'),

(7, 8, '2022-06-19'),

(6, 5, '2022-06-19'),

(6, 7, '2022-07-21'),

(6, 2, '2022-05-25');

SELECT first\_name, last\_name, count(\*)

FROM buyers

JOIN purchases ON buyers.id = buyers\_id

JOIN products ON products\_id = products.id

WHERE product\_name = 'Кока-кола'

GROUP BY (first\_name, last\_name)

HAVING count(\*) >=5;

SELECT first\_name, last\_name, SUM(price) FROM buyers

JOIN purchases ON buyers.id = buyers\_id

JOIN products ON products\_id = products.id

GROUP BY (first\_name, last\_name)

HAVING SUM(price) >= 100 AND SUM(price) <= 700;

SELECT first\_name, last\_name, SUM(price) AS summ FROM buyers

JOIN purchases ON buyers.id = buyers\_id

JOIN products ON products\_id = products.id

GROUP BY (first\_name, last\_name)

ORDER BY summ LIMIT 3

SELECT textcat(textcat(last\_name,' '), first\_name) AS full\_name, product\_name, price

FROM buyers JOIN purchases ON buyers.id = buyers\_id JOIN products ON products\_id = products.id

WHERE date\_of\_buy >= DATE('2022-05-25') AND date\_of\_buy <= DATE('2022-08-23')

AND (EXTRACT(dow FROM date\_of\_buy) IN (1, 2, 3, 4, 5))

ORDER BY full\_name