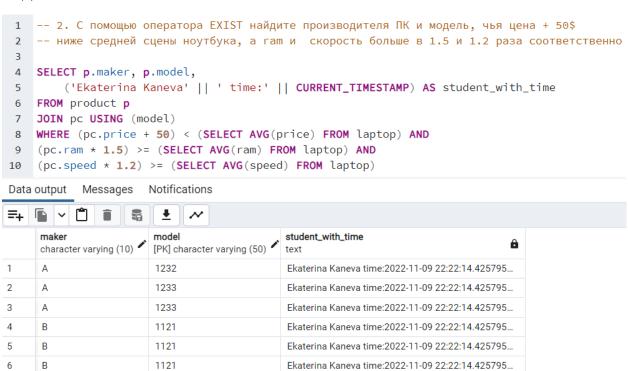
## Задание №1.

```
-- 1. Найти производителей, делающих ноутбуки и ПК, но не принтеры (используя EXIST).
 2
 3
    SELECT maker,
        ('Ekaterina Kaneva' || ' time:' || CURRENT_TIMESTAMP) AS student_with_time
 4
 5
    FROM product AS lp
 6
    WHERE type = 'Laptop' AND
 7
    EXISTS (SELECT maker
 8
             FROM product
             WHERE type = 'PC'
 9
             AND maker = lp.maker)
10
    AND
11
    NOT EXISTS (SELECT maker
12
13
                 FROM product
14
                 WHERE type = 'Printer'
15
                 AND maker = lp.maker)
16
                    Notifications
Data output
           Messages
                        <u>+</u>
    ~
                       student_with_time
     character varying (10)
                       text
     В
                       Ekaterina Kaneva ...
1
```

## Задание №2.



## Задание №3.

21 WHERE p.speed > pc\_lp.avg\_speed

```
1 -- 3. a) Найдите среднюю скорость и с помощью UNION ALL выведите 3 колонки
     -- "product_type", "product_model", и "avg_speed" по всем моделям для ПК и ноутбуков
 3
     SELECT p.type AS product_type, p.model AS product_model, AVG(pc_and_lp.speed) AS avg_speed,
 4
 5
           ('Ekaterina Kaneva' || ' time:' || CURRENT_TIMESTAMP) AS student_with_time
     FROM product p
 6
     JOIN (SELECT speed, model
 7
             FROM pc
 8
 9
             UNION ALL
             SELECT speed, model
10
             FROM laptop) pc_and_lp USING(model)
11
12
     GROUP BY p.model
13
     ORDER BY p.type
Data output Messages Notifications
                              . . ~
     product_model
      product_type
                                                  avg_speed
                                                               student with time
      character varying (50)
                                                           ٥
                                                                                                          â
                            character varying (50)
                                                  numeric
                                                               text
1
      Laptop
                             1752
                                                  750.00000000 Ekaterina Kaneva time:2022-11-09 22:32:32.2376+03
2
                                                  500.00000000 Ekaterina Kaneva time:2022-11-09 22:32:32.2376+03
      Laptop
                             1321
3
      Laptop
                             1750
                                                  750.00000000 Ekaterina Kaneva time:2022-11-09 22:32:32.2376+03
4
       Laptop
                             1298
                                                  466.6666666 Ekaterina Kaneva time:2022-11-09 22:32:32.2376+03
5
       PC
                             1232
                                                  475.00000000 Ekaterina Kaneva time:2022-11-09 22:32:32.2376+03
6
       PC
                             1233
                                                  737.50000000 Ekaterina Kaneva time:2022-11-09 22:32:32.2376+03
7
      PC
                             1260
                                                  500.0000000 Ekaterina Kaneva time:2022-11-09 22:32:32.2376+03
8
      PC
                             1121
                                                  650.0000000 Ekaterina Kaneva time:2022-11-09 22:32:32.2376+03
1 -- 3. 6) Оберните запрос из пункта а): вывести производителя, модель, скорость, тип,
   -- и среднюю скорость из подзапроса пункта а) тех ПК и ноутбуков, чья скорость выше.
4
   SELECT p.maker, pc_lp.product_model, p.speed, pc_lp.product_type, pc_lp.avg_speed,
        ('Ekaterina Kaneva' || ' time:' || CURRENT_TIMESTAMP) AS student_with_time
6
   FROM (SELECT maker, model, speed
    FROM product
                                                                Data output
   JOIN (SELECT model, speed
8
                                                                =+ □ ∨ □ ■ ■ ★ /
9
         FROM pc
         UNION ALL
10
                                                                                    product_model speed smallint
                                                                                                            product_type
11
         SELECT model, speed FROM laptop) ms USING(model)) p
   JOIN (SELECT p.type AS product_type, p.model AS product_model,
12
                                                                                                         500
                                                                                                            PC
                                                                                     1232
         AVG(pc_and_lp.speed) AS avg_speed
13
                                                                                                         900
         FROM product p
14
                                                                                     1233
                                                                                                         800
                                                                                                            PC
15
         JOIN (SELECT speed, model
                                                                4
                                                                     В
                                                                                     1121
                                                                                                         750
                                                                                                            PC
16
               FROM pc
17
               UNION ALL
                                                                                     1233
                                                                                                         750
                                                                                                            PC
                                                                5
                                                                     Α
               SELECT speed, model
18
                                                                                                         500 PC
                                                                     Α
                                                                                     1232
               FROM laptop) pc_and_lp USING(model)
19
                                                                                     1298
                                                                                                         600 Laptop
         GROUP BY p.model) pc_lp ON (pc_lp.product_model = p.model)
20
```