

## Лабораторная работа №4. Обработка и визуализация данных. Выполнил Шуплецов Александр Андреевич, НКА бд-03-22.

1. Найдите количество товаров каждого типа у каждого производителя; вывести производителя, тип и количество такого товара.

```
17 SELECT pr.make, pr.type, COUNT(pr.make),
18 ('Alexandr_Shupletsov' || ' time: ' || CURRENT_TIMESTAMP) AS "student_with_time"
19 FROM product pr
20 GROUP BY pr.make, pr.type
21 ORDER BY pr.make, pr.type
22
```

Data output Messages Notifications



	make character varying (10)	type character varying (50)	count bigint	student_with_time text
1	A	Laptop	2	Alexandr_Shuplet...
2	A	PC	2	Alexandr_Shuplet...
3	A	Printer	3	Alexandr_Shuplet...
4	B	Laptop	1	Alexandr_Shuplet...
5	B	PC	1	Alexandr_Shuplet...
6	C	Laptop	1	Alexandr_Shuplet...
7	D	Printer	2	Alexandr_Shuplet...
8	E	PC	3	Alexandr_Shuplet...
9	E	Printer	1	Alexandr_Shuplet...

Total rows: 9 of 9 Query complete 00:00:00.677

Ln 20, Col 27

2. Найдите. самый дорогой товар каждого типа, вывести тип и цену.

```
32 SELECT 'Laptop' AS type, MAX(price),
33 ('Alexandr_Shupletsov' || ' time: ' || CURRENT_TIMESTAMP) AS "student_with_time"
34 FROM laptop
35 UNION
36 SELECT 'PC', MAX(price),
37 ('Alexandr_Shupletsov' || ' time: ' || CURRENT_TIMESTAMP) AS "student_with_time"
38 FROM pc
39 UNION
40 SELECT 'Printer', MAX(price),
41 ('Alexandr_Shupletsov' || ' time: ' || CURRENT_TIMESTAMP) AS "student_with_time"
42 FROM printer
43
```

Data output Messages Notifications



	type text	max numeric	student_with_time text
1	PC	980.0000	Alexandr_Shupletsov time: 2022-10-31 01:35:55.319724...
2	Printer	400.0000	Alexandr_Shupletsov time: 2022-10-31 01:35:55.319724...
3	Laptop	1200.0000	Alexandr_Shupletsov time: 2022-10-31 01:35:55.319724...

Total rows: 3 of 3 Query complete 00:00:00.759

Ln 42, Col 13

3.Найти производителей, делающих ноутбуки и пк ценой более 600\$, но которые не производят принтеры, вывести производителя.

```
56 SELECT pr.make,
57 ('Alexandr_Shupletsov' || ' time: '||CURRENT_TIMESTAMP) AS "student_with_time"
58 FROM product pr JOIN pc USING (model)
59 WHERE pc.price > 600
60 INTERSECT
61 SELECT pr.make,
62 ('Alexandr_Shupletsov' || ' time: '||CURRENT_TIMESTAMP) AS "student_with_time"
63 FROM product pr JOIN laptop lp USING (model)
64 WHERE lp.price > 600
65 EXCEPT
66 SELECT pr.make,
67 ('Alexandr_Shupletsov' || ' time: '||CURRENT_TIMESTAMP) AS "student_with_time"
68 FROM product pr
69 WHERE pr.type = 'Printer'
```

Data output Messages Notifications

	maker character varying (10)	student_with_time text
1	B	Alexandr_Shupletsov time: 2022-10-31 22:45:57.149209+03