Лабораторная работа №7. Обработка и визуализация данных. Выполнил Шуплецов Александр Андреевич, НКА бд-03-22.

Найти сводную таблицу с помощью **UNION** со всеми колонками для каждого товара (ПК, лаптоп, принтер), вывести количество строк.

В случае отсутствия колонки – выводим в значение NONE (например, в таблице PC нет колонки "screen")

Query   Query History

```sql
1   with my_union AS(
2       SELECT pr.type, pr.maker, pr.model, lp.code,
3       CAST(lp.speed AS text),
4       CAST(lp.ram AS text),
5       CAST(lp.hd AS text),
6       CAST(lp.price AS text),
7       CAST(lp.screen AS text),
8       'NONE' AS cd,
9       'NONE' AS printer_type,
10      'NONE' AS color
11      FROM product pr JOIN laptop lp ON (pr.model = lp.model)
12
13      UNION
14
15      SELECT pr.type, pr.maker, pr.model, pc.code,
16      CAST(pc.speed AS text),
17      CAST(pc.ram AS text),
18      CAST(pc.hd AS text),
19      CAST(pc.price AS text),
20      'NONE' AS screen,
21      pc.cd,
22      'NONE' AS printer_type,
23      'NONE' AS color
24      FROM product pr JOIN pc pc ON (pr.model = pc.model)
25
26      UNION
27
28      SELECT pr.type,pr.maker,pr.model,prin.code,
29      'NONE' AS speed,
30      'NONE' AS ram,
31      'NONE' AS hd,
32      CAST(prin.price AS text),
33      'NONE' AS screen,
34      'NONE' AS cd,
35      prin.type,
36      prin.color
37      FROM product pr JOIN printer prin ON pr.model = prin.model
38      )
39
40      SELECT *,
41      ('Alexandr_Shupletsov time: '||CURRENT_TIMESTAMP) AS student_with_time
42      FROM my_union
43      ORDER BY my_union.type
```

	type character varying (50)	maker character varying (10)	model character varying	code integer	speed text	ram text	hd text	price text	screen text	cd character varying	printer_type text	color text	student_with_time text
1	Laptop	A	1298	1	350	32	4	700.0000	11	NONE	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
2	Laptop	A	1752	5	750	128	10	1150.0000	14	NONE	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
3	Laptop	A	1298	6	450	64	10	950.0000	12	NONE	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
4	Laptop	C	1321	2	500	64	8	970.0000	12	NONE	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
5	Laptop	A	1298	4	600	64	10	1050.0000	15	NONE	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
6	Laptop	B	1750	3	750	128	12	1200.0000	14	NONE	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
7	PC	A	1232	8	450	64	8	350.0000	NONE	24x	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
8	PC	A	1232	9	450	32	10	350.0000	NONE	24x	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
9	PC	E	1260	10	500	32	10	350.0000	NONE	12x	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
10	PC	A	1232	1	500	64	5	600.0000	NONE	12x	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
11	PC	B	1121	2	750	128	14	850.0000	NONE	40x	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
12	PC	A	1233	11	900	128	40	980.0000	NONE	40x	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
13	PC	A	1233	12	800	128	20	970.0000	NONE	50x	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
14	PC	B	1121	4	600	128	14	850.0000	NONE	40x	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
15	PC	A	1233	3	500	64	5	600.0000	NONE	12x	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
16	PC	A	1233	6	750	128	20	950.0000	NONE	50x	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
17	PC	B	1121	5	600	128	8	850.0000	NONE	40x	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
18	PC	A	1232	7	500	32	10	400.0000	NONE	12x	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
19	Printer	A	1401	4	NONE	NONE	NONE	150.0000	NONE	NONE	NONE	NONE	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
20	Printer	D	1288	6	NONE	NONE	NONE	400.0000	NONE	NONE	Matrix	n	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
21	Printer	A	1276	1	NONE	NONE	NONE	400.0000	NONE	NONE	Laser	n	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
22	Printer	A	1408	5	NONE	NONE	NONE	270.0000	NONE	NONE	Matrix	n	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
23	Printer	E	1434	3	NONE	NONE	NONE	290.0000	NONE	NONE	Jet	y	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03
24	Printer	D	1433	2	NONE	NONE	NONE	270.0000	NONE	NONE	Jet	y	Alexandr_Shupletsov time: 2022-12-24 17:05:22.474289+03