### Практика 23.10.2024

- 1. Нужно зарегистрироваться на сайте sql-ex
- 2. Выполнить задания: 6, 7, 9, 13, 14, 18, 19, 16, 29, 30, 34
- 3. В качестве ответа приложить скрипты и скриншоты с сайта, иллюстрирующие, что запрос выполнен верно. Приложить все одним файлом

```
SELECT DISTINCT p.maker, l.speed
FROM Product
JOIN Laptop 1 ON p.model = l.model
WHERE p.type = 'Laptop' AND l.hd >= 10;
```

# Правильно **maker speed**A 450 A 600 A 750 B 750

```
SELECT
  DISTINCT product.model,
  pc.price
FROM Product JOIN pc ON (product.model = pc.model)
WHERE maker = 'B'

UNION
SELECT
  DISTINCT product.model,
  laptop.price
FROM product
```

```
JOIN laptop ON (product.model=laptop.model)
WHERE maker='B'

UNION
SELECT DISTINCT product.model,
   printer.price
FROM product
JOIN printer ON product.model=printer.model
WHERE maker='B'
```

### model price

1121 850.0000

1750 1200.0000

```
SELECT DISTINCT maker FROM
(SELECT maker, model FROM Product) p
JOIN
(SELECT model, speed FROM PC WHERE speed >= 450) pc
ON p.model = pc.model
```

### Правильно

### maker

Α

В

F

```
--13
SELECT AVG(speed)
FROM pc
JOIN product
```

```
ON pc.model = product.model
WHERE product.maker = 'A';
```

### Правильно

class	name	country
North Carolina	North Carolina	USA
North Carolina	South Dakota	USA
North Carolina	Washington	USA
Tennessee	California	USA
Tennessee	Tennessee	USA

```
MIN(price)

FROM

printer

WHERE

color = 'y'

);
```

### maker price

D 270.0000

```
-- 19
SELECT maker, AVG(screen) FROM
Product p
JOIN
Laptop 1
ON p.model = 1.model
GROUP BY maker
```

## Правильно **maker**A 13 B 14 C 12

```
ON p1.speed = p2.speed
AND p1.ram = p2.ram
AND p1.model > p2.model;
```

model	model	speed	d ram
1233	1121	750	128
1233	1232	500	64
1260	1232	500	32

```
SELECT
    i.point,
    i.date,
    i.inc,
    o.out
FROM
    Income_o i
FULL OUTER JOIN
    Outcome_o o
ON i.point = o.point AND i.date = o.date
ORDER BY
    i.point, i.date;
```

### Неверно

\* Неверное число записей (меньше на 10)

point	date	inc	out
1	2001-03-22 00:00:00.000	15000.0000	NULL
1	2001-03-23 00:00:00.000	15000.0000	NULL
1	2001-03-24 00:00:00.000	3400.0000	3663.0000
1	2001-04-13 00:00:00.000	5000.0000	4490.0000
1	2001-05-11 00:00:00.000	4500.0000	2530.0000
2	2001-03-22 00:00:00.000	10000.0000	1440.0000
2	2001-03-24 00:00:00.000	1500.0000	NULL
3	2001-09-13 00:00:00.000	11500.0000	1500.0000
3	2001-10-02 00:00:00.000	18000.0000	NULL

point	date		inc	out
1	2001-03-14	00:00:00.000	NULL	15348.0000
1	2001-03-22	00:00:00.000	15000.0000	NULL
1	2001-03-23	00:00:00.000	15000.0000	NULL
1	2001-03-24	00:00:00.000	3400.0000	3663.0000
1	2001-03-26	00:00:00.000	NULL	1221.0000
1	2001-03-28	00:00:00.000	NULL	2075.0000
1	2001-03-29	00:00:00.000	NULL	2004.0000
1	2001-04-11	00:00:00.000	NULL	3195.0400
1	2001-04-13	00:00:00.000	5000.0000	4490.0000
1	2001-04-27	00:00:00.000	NULL	3110.0000

```
SELECT
    COALESCE(i.point, o.point) AS point,
    COALESCE(i.date, o.date) AS date,

SUM(o.out),
    SUM(i.inc)
FROM
    Income i
FULL OUTER JOIN
    Outcome o ON i.point = o.point AND i.date = o.date
GROUP BY
    COALESCE(i.point, o.point), COALESCE(i.date, o.date)
```

ORDER BY point, date;

Неверно \* Несовпадение данных (6)

point	date				
1	2001-03-14	00:00:00	.000	15348.0000	
1	2001-03-22	00:00:00	.000		30000.0000
1	2001-03-23	00:00:00	.000		15000.0000
1	2001-03-24	00:00:00	.000	14326.0000	14000.0000
1	2001-03-26	00:00:00	.000	1221.0000	
1	2001-03-28	00:00:00	.000	2075.0000	
1	2001-03-29	00:00:00	.000	4010.0000	
1	2001-04-11	00:00:00	.000	3195.0400	
1	2001-04-13	00:00:00	.000	8980.0000	10000.0000
1	2001-04-27	00:00:00	.000	3110.0000	
1	2001-05-11	00:00:00	.000	2530.0000	4500.0000
2	2001-03-22	00:00:00	.000	2880.0000	20000.0000
2	2001-03-24	00:00:00	.000		3000.0000
2	2001-03-29	00:00:00	.000	7848.0000	
2	2001-04-02	00:00:00	.000	2040.0000	
3	2001-09-13	00.00.00	000	5400.0000	6200 0000
_	2001 05 15	00.00.00	.000	3 100.0000	0200.0000
3	2001-09-14				0200.0000
3					income
3	2001-09-14 date	00:00:00	.000	1150.0000	income
3 point	2001-09-14 date	00:00:00	.000	1150.0000 Outcome 15348.0000	income
3 point 1	2001-09-14 date 2001-03-14	00:00:00 00:00:00 00:00:00	.000	1150.0000 Outcome 15348.0000 NULL	<b>income</b> NULL
point 1 1	2001-09-14  date 2001-03-14 2001-03-22 2001-03-23	00:00:00 00:00:00 00:00:00	.000	1150.0000 Outcome 15348.0000 NULL	income NULL 30000.0000 15000.0000
3 point 1 1 1	2001-09-14  date 2001-03-14 2001-03-22 2001-03-23	00:00:00 00:00:00 00:00:00 00:00:00	.000	1150.0000 Outcome 15348.0000 NULL NULL 7163.0000	income NULL 30000.0000 15000.0000
3 point 1 1 1 1	2001-09-14 date 2001-03-14 2001-03-22 2001-03-23 2001-03-24	00:00:00 00:00:00 00:00:00 00:00:00	.000	1150.0000 Outcome 15348.0000 NULL NULL 7163.0000 1221.0000	income NULL 30000.0000 15000.0000 7000.0000
3 point 1 1 1 1 1	2001-09-14  date 2001-03-14 2001-03-22 2001-03-23 2001-03-24 2001-03-26	00:00:00 00:00:00 00:00:00 00:00:00 00:00:	.000	1150.0000  Outcome 15348.0000  NULL  NULL 7163.0000 1221.0000 2075.0000	income NULL 30000.0000 15000.0000 7000.0000 NULL
3 point 1 1 1 1 1 1	2001-09-14  date 2001-03-14 2001-03-22 2001-03-23 2001-03-24 2001-03-26 2001-03-28	00:00:00 00:00:00 00:00:00 00:00:00 00:00:00	.000 .000 .000 .000 .000	1150.0000  Outcome 15348.0000  NULL  NULL 7163.0000 1221.0000 2075.0000 4010.0000	income NULL 30000.0000 15000.0000 7000.0000 NULL NULL
3 point 1 1 1 1 1 1 1 1	2001-09-14  date  2001-03-14  2001-03-22  2001-03-23  2001-03-24  2001-03-28  2001-03-29  2001-04-11	00:00:00 00:00:00 00:00:00 00:00:00 00:00:00 00:00:00	.000 .000 .000 .000 .000	1150.0000  Outcome 15348.0000  NULL  NULL 7163.0000 1221.0000 2075.0000 4010.0000 3195.0400	income NULL 30000.0000 15000.0000 7000.0000 NULL NULL NULL
3 point 1 1 1 1 1 1 1 1 1	2001-09-14  date  2001-03-14  2001-03-22  2001-03-23  2001-03-24  2001-03-28  2001-03-29  2001-04-11	00:00:00 00:00:00 00:00:00 00:00:00 00:00:00 00:00:00	.000 .000 .000 .000 .000 .000	1150.0000  Outcome 15348.0000  NULL  NULL 7163.0000 1221.0000 2075.0000 4010.0000 3195.0400 4490.0000	income NULL 30000.0000 15000.0000 7000.0000 NULL NULL NULL NULL
3 point 1 1 1 1 1 1 1 1 1 1	2001-09-14  date  2001-03-14  2001-03-22  2001-03-23  2001-03-24  2001-03-28  2001-03-29  2001-04-11  2001-04-13	00:00:00 00:00:00 00:00:00 00:00:00 00:00:00 00:00:00 00:00:00	.000 .000 .000 .000 .000 .000	1150.0000  Outcome 15348.0000  NULL  NULL 7163.0000 1221.0000 2075.0000 4010.0000 3195.0400 4490.0000 3110.0000	income NULL 30000.0000 15000.0000 7000.0000 NULL NULL NULL NULL 10000.0000
3  point 1 1 1 1 1 1 1 1 1 1 1	2001-09-14 2001-03-14 2001-03-22 2001-03-23 2001-03-24 2001-03-26 2001-03-28 2001-04-11 2001-04-13 2001-04-27 2001-05-11	00:00:00 00:00:00 00:00:00 00:00:00 00:00:00 00:00:00 00:00:00 00:00:00	.000 .000 .000 .000 .000 .000	1150.0000  Outcome 15348.0000  NULL  NULL 7163.0000 1221.0000 2075.0000 4010.0000 3195.0400 4490.0000 3110.0000 2530.0000	income NULL 30000.0000 15000.0000 7000.0000 NULL NULL NULL NULL 10000.0000 NULL
3  point  1  1  1  1  1  1  1  1  1  1  1  1  1	2001-09-14 2001-03-14 2001-03-22 2001-03-23 2001-03-24 2001-03-26 2001-03-28 2001-04-11 2001-04-13 2001-04-27 2001-05-11	00:00:00 00:00:00 00:00:00 00:00:00 00:00:00 00:00:00 00:00:00 00:00:00	.000 .000 .000 .000 .000 .000 .000	1150.0000  Outcome 15348.0000  NULL  NULL 7163.0000 1221.0000 2075.0000 4010.0000 3195.0400 4490.0000 3110.0000 2530.0000 2880.0000	income NULL 30000.0000 15000.0000 7000.0000 NULL NULL NULL 10000.0000 NULL 4500.0000

2 2001-04-02 00:00:00.000 2040.0000 NULL 3 2001-09-13 00:00:00.000 2700.0000 3100.0000 3 2001-09-14 00:00:00.000 1150.0000 NULL

```
--34
SELECT name
FROM classes, ships
WHERE launched >=1922
        AND type='bb'
        AND displacement>35000
        AND ships.class = classes.class
```

### Правильно

### name

Iowa

Missouri

Musashi

**New Jersey** 

North Carolina

South Dakota

Washington

Wisconsin

Yamato