

Домашнее задание

Табличка:

<https://drive.google.com/file/d/1PQn576YVakvIWrIgIjSP9Yef5id4cqYs/view?usp=sharing>

1. Вывести на экран, сколько машин каждого цвета для машин марок BMW и LADA
2. Вывести на экран марку авто(количество) и количество авто не этой марки.
100 машин, из них 20 - BMW и 80 машин другой марки, AUDI - 30 и 70 машин другой марки, LADA - 15, 85 авто другой марки

Задание №3.

Даны 2 таблицы, созданные следующим образом:

```
create table test_a (id INT, test varchar(10));
```

```
create table test_b (id INT);
```

Домашнее задание

```
insert into test_a(id, test) values
```

```
(10, 'A'),
```

```
(20, 'A'),
```

```
(30, 'F'),
```

```
(40, 'D'),
```

```
(50, 'C');
```

```
insert into test_b(id) values
```

```
(10),
```

```
(30),
```

```
(50);
```

Напишите запрос, который вернет строки из таблицы test_a, id которых нет в таблице test_b, НЕ используя ключевого слова NOT.

```
MySQL 8.0 Command Line Client
mysql> CREATE DATABASE seminar4;
Query OK, 1 row affected (0.39 sec)

mysql> SHOW DATABASES;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| sakila |
| seminar1 |
| seminar2 |
| seminar3 |
| seminar4 |
| sys |
| world |
+-----+
10 rows in set (0.00 sec)

mysql> USE seminar4;
Database changed
mysql> CREATE TABLE AUTO
-> (
-> REGNUM VARCHAR(10) PRIMARY KEY,
-> MARK VARCHAR(10),
-> COLOR VARCHAR(15),
-> RELEASEDT DATE,
-> PHONENUM VARCHAR(15)
-> );
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'PRIMARY KEY, MARK VARCHAR(10), COLOR VARCHAR(15), RELEASEDT DATE, PHONENUM VARCH' at line 3
mysql> CREATE TABLE AUTO
-> (
-> REGNUM VARCHAR(10) PRIMARY KEY,
-> MARK VARCHAR(10),
-> COLOR VARCHAR(15),
-> RELEASEDT DATE,
-> PHONENUM VARCHAR(15)
-> );
Query OK, 0 rows affected (0.58 sec)

mysql> INSERT INTO AUTO (REGNUM, MARK, COLOR, RELEASEDT, PHONENUM )
-> VALUES
-> ((111114, 'LADA', 'КРАСНЫЙ', date'2008-01-01', '9152222221'),
-> ((111115, 'VOLVO', 'КРАСНЫЙ', date'2013-01-01', '9173333334'),
-> ((111116, 'BMW', 'СИНИЙ', date'2015-01-01', '9173333334'),
-> ((111121, 'AUDI', 'СИНИЙ', date'2009-01-01', '9173333332'),
-> ((111122, 'AUDI', 'СИНИЙ', date'2011-01-01', '9213333336'),
-> ((111113, 'BMW', 'ЗЕЛЕНый', date'2007-01-01', '9214444444'),
-> ((111126, 'LADA', 'ЗЕЛЕНый', date'2005-01-01', null),
-> ((111117, 'BMW', 'СИНИЙ', date'2005-01-01', null),
-> ((111119, 'LADA', 'СИНИЙ', date'2017-01-01', '9213333331'),
Query OK, 9 rows affected (0.31 sec)
Records: 9 Duplicates: 0 Warnings: 0

mysql> SELECT MARK, COLOR, COUNT(COLOR) AS 'QUANTITY'
-> FROM AUTO
-> WHERE MARK = 'LADA'
-> GROUP BY COLOR, MARK
-> UNION SELECT MARK, COLOR, COUNT(COLOR) AS 'QUANTITY'
-> FROM AUTO
-> WHERE MARK = 'BMW'
-> GROUP BY COLOR, MARK;
+-----+
| MARK | COLOR | QUANTITY |
+-----+
| LADA | КРАСНЫЙ | 1 |
| LADA | СИНИЙ | 1 |
| LADA | ЗЕЛЕНый | 1 |
| BMW | ЗЕЛЕНый | 1 |
| BMW | СИНИЙ | 2 |
+-----+
5 rows in set (0.10 sec)

mysql> SELECT MARK, COUNT(*) as count,
-> (SELECT COUNT(*) FROM auto WHERE MARK != a.MARK) as non_matching_count
-> FROM auto a
-> GROUP BY MARK;
+-----+
| MARK | count | non_matching_count |
+-----+
| BMW | 3 | 6 |
| LADA | 3 | 6 |
| VOLVO | 1 | 8 |
| AUDI | 2 | 7 |
+-----+
4 rows in set (0.00 sec)

mysql> CREATE TABLE test_a (id INT, test VARCHAR(10));
Query OK, 0 rows affected (0.17 sec)

mysql> CREATE TABLE test_b (id INT);
Query OK, 0 rows affected (0.15 sec)

mysql> INSERT INTO test_a (id, test) VALUES
-> ((10, 'A'), (20, 'A'), (30, 'A'), (40, 'D'), (50, 'C'));
```

```
Выборка MySQL 8.0 Command Line Client
-> ((111121, 'AUDI', 'СИНИЙ', date'2009-01-01', '9173333332'),
-> ((111122, 'AUDI', 'СИНИЙ', date'2011-01-01', '9213333336'),
-> ((111113, 'BMW', 'ЗЕЛЕНый', date'2007-01-01', '9214444444'),
-> ((111126, 'LADA', 'ЗЕЛЕНый', date'2005-01-01', null),
-> ((111117, 'BMW', 'СИНИЙ', date'2005-01-01', null),
-> ((111119, 'LADA', 'СИНИЙ', date'2017-01-01', '9213333331'),
Query OK, 9 rows affected (0.31 sec)
Records: 9 Duplicates: 0 Warnings: 0

mysql> SELECT MARK, COLOR, COUNT(COLOR) AS 'QUANTITY'
-> FROM AUTO
-> WHERE MARK = 'LADA'
-> GROUP BY COLOR, MARK
-> UNION SELECT MARK, COLOR, COUNT(COLOR) AS 'QUANTITY'
-> FROM AUTO
-> WHERE MARK = 'BMW'
-> GROUP BY COLOR, MARK;
+-----+
| MARK | COLOR | QUANTITY |
+-----+
| LADA | КРАСНЫЙ | 1 |
| LADA | СИНИЙ | 1 |
| LADA | ЗЕЛЕНый | 1 |
| BMW | ЗЕЛЕНый | 1 |
| BMW | СИНИЙ | 2 |
+-----+
5 rows in set (0.10 sec)

mysql> SELECT MARK, COUNT(*) as count,
-> (SELECT COUNT(*) FROM auto WHERE MARK != a.MARK) as non_matching_count
-> FROM auto a
-> GROUP BY MARK;
+-----+
| MARK | count | non_matching_count |
+-----+
| BMW | 3 | 6 |
| LADA | 3 | 6 |
| VOLVO | 1 | 8 |
| AUDI | 2 | 7 |
+-----+
4 rows in set (0.00 sec)

mysql> CREATE TABLE test_a (id INT, test VARCHAR(10));
Query OK, 0 rows affected (0.17 sec)

mysql> CREATE TABLE test_b (id INT);
Query OK, 0 rows affected (0.15 sec)

mysql> INSERT INTO test_a (id, test) VALUES
-> ((10, 'A'), (20, 'A'), (30, 'A'), (40, 'D'), (50, 'C'));
```

```
mysql> CREATE TABLE test_a (id INT, test VARCHAR(10));
Query OK, 0 rows affected (0.17 sec)

mysql> CREATE TABLE test_b (id INT);
Query OK, 0 rows affected (0.15 sec)

mysql> INSERT INTO test_a (id, test) VALUES
    -> (10, 'A'), (20, 'A'), (30, 'F'), (40, 'D'), (50, 'C');
Query OK, 5 rows affected (0.10 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> INSERT INTO test_b (id) VALUES
    -> (10), (30), (50);
Query OK, 3 rows affected (0.08 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> SELECT a.*
    -> FROM test_a a
    -> LEFT JOIN test_b b ON a.id = b.id
    -> WHERE b.id IS NULL;
+----+-----+
| id | test |
+----+-----+
| 20 | A    |
| 40 | D    |
+----+-----+
2 rows in set (0.00 sec)

mysql>
```