

-- 1 --

```
use shop;
select * from users;
update users set created_at = null, updated_at = null;
```

users 1

`select * from users` Введите SQL выражение чтобы отфильтровать результаты

	id	name	birthday_at	created_at	updated_at
1	1	Геннадий	1990-10-05	[NULL]	[NULL]
2	2	Наталья	1984-11-12	[NULL]	[NULL]
3	3	Александр	1985-05-20	[NULL]	[NULL]
4	4	Сергей	1988-02-14	[NULL]	[NULL]
5	5	Иван	1998-01-12	[NULL]	[NULL]
6	6	Мария	1992-08-29	[NULL]	[NULL]

```
use shop;
select * from users;
update users set created_at = null, updated_at = null;

update users set created_at = now(), updated_at = now();
```

users 1

`select * from users` Введите SQL выражение чтобы отфильтровать результаты

	id	name	birthday_at	created_at	updated_at
1	1	Геннадий	1990-10-05	2021-07-13 22:46:06	2021-07-13 22:46:06
2	2	Наталья	1984-11-12	2021-07-13 22:46:06	2021-07-13 22:46:06
3	3	Александр	1985-05-20	2021-07-13 22:46:06	2021-07-13 22:46:06
4	4	Сергей	1988-02-14	2021-07-13 22:46:06	2021-07-13 22:46:06
5	5	Иван	1998-01-12	2021-07-13 22:46:06	2021-07-13 22:46:06
6	6	Мария	1992-08-29	2021-07-13 22:46:06	2021-07-13 22:46:06

-- 2 --

```
use shop;
select * from users;
update users set created_at = null, updated_at = null;
update users set created_at = now(), updated_at = now();

alter table users modify column created_at varchar(255);
alter table users modify column updated_at varchar(255);
desc users;
```

columns 1							
desc users Введите SQL выражение чтобы отфильтровать результаты							
Таблица	Field	Type	Null	Key	Default	Extra	
1	id	bigint unsigned	NO	PRI	[NULL]	auto_increment	
2	name	varchar(255)	YES		[NULL]		
3	birthday_at	date	YES		[NULL]		
4	created_at	varchar(255)	YES		[NULL]		
5	updated_at	varchar(255)	YES		[NULL]		

```
alter table users modify column updated_at varchar(255);
desc users;
update users set created_at = '20.10.2017 8:10', updated_at = '20.10.2017 8:10';
```

select * from users Введите SQL выражение чтобы отфильтровать результаты						
Таблица	id	name	birthday_at	created_at	updated_at	
1	1	Геннадий	1990-10-05	20.10.2017 8:10	20.10.2017 8:10	
2	2	Наталья	1984-11-12	20.10.2017 8:10	20.10.2017 8:10	
3	3	Александр	1985-05-20	20.10.2017 8:10	20.10.2017 8:10	
4	4	Сергей	1988-02-14	20.10.2017 8:10	20.10.2017 8:10	
5	5	Иван	1998-01-12	20.10.2017 8:10	20.10.2017 8:10	
6	6	Мария	1992-08-29	20.10.2017 8:10	20.10.2017 8:10	

```
select str_to_date(created_at , "%d.%m.%Y %k:%i") from users;
update users set created_at = str_to_date(created_at , "%d.%m.%Y %k:%i"), updated_at = str_to_date(updated_at , "%d.%m.%Y %k:%i");
```

users 1					
select * from users Введите SQL выражение чтобы отфильтровать результаты					
Таблица	id	name	birthday_at	created_at	updated_at
1	1	Геннадий	1990-10-05	2017-10-20 08:10:00	2017-10-20 08:10:00
2	2	Наталья	1984-11-12	2017-10-20 08:10:00	2017-10-20 08:10:00
3	3	Александр	1985-05-20	2017-10-20 08:10:00	2017-10-20 08:10:00
4	4	Сергей	1988-02-14	2017-10-20 08:10:00	2017-10-20 08:10:00
5	5	Иван	1998-01-12	2017-10-20 08:10:00	2017-10-20 08:10:00
6	6	Мария	1992-08-29	2017-10-20 08:10:00	2017-10-20 08:10:00

```
select * from storehouses_products;|
desc storehouses_products ;
insert into storehouses_products (storehouse_id, product_id, value) values (floor(1 + rand() * 3), floor(1 + rand() * 100), floor(1 + rand() * 100));
insert into storehouses_products (storehouse_id, product_id, value) values (floor(1 + rand() * 3), floor(1 + rand() * 100), 0);
```

storehouses_products 1

`select * from storehouses_products` | Введите SQL выражение чтобы отфильтровать результаты

	123 id	123 storehouse_id	123 product_id	123 value	created_at	updated_at
1	1	3	19	62	2021-07-13 23:07:47	2021-07-13 23:07:47
2	2	2	74	12	2021-07-13 23:07:52	2021-07-13 23:07:52
3	3	2	52	47	2021-07-13 23:07:53	2021-07-13 23:07:53
4	4	3	48	5	2021-07-13 23:07:53	2021-07-13 23:07:53
5	5	3	88	97	2021-07-13 23:07:53	2021-07-13 23:07:53
6	6	1	8	80	2021-07-13 23:07:53	2021-07-13 23:07:53
7	7	3	46	96	2021-07-13 23:07:54	2021-07-13 23:07:54
8	8	2	22	83	2021-07-13 23:07:54	2021-07-13 23:07:54
9	9	2	99	44	2021-07-13 23:07:55	2021-07-13 23:07:55
10	10	1	80	34	2021-07-13 23:07:56	2021-07-13 23:07:56
11	11	1	43	26	2021-07-13 23:07:56	2021-07-13 23:07:56
12	12	1	28	37	2021-07-13 23:07:57	2021-07-13 23:07:57
13	13	3	88	0	2021-07-13 23:08:34	2021-07-13 23:08:34
14	14	2	39	0	2021-07-13 23:08:35	2021-07-13 23:08:35
15	15	3	46	0	2021-07-13 23:08:36	2021-07-13 23:08:36

```
select id, value from storehouses_products order by case when value = 0 then 1 else 0 end, value;
```

	123 id	123 value
1	4	5
2	2	12
3	11	26
4	10	34
5	12	37
6	9	44
7	3	47
8	1	62
9	6	80
10	8	83
11	7	96
12	5	97
13	13	0
14	14	0
15	15	0

```

select name, birthday_at from users where SUBSTR(birthday_at,6,2) = '05' or SUBSTR(birthday_at,6,2) = '08' ;
select name, case when SUBSTR(birthday_at,6,2) = '05' then 'may'
                  when SUBSTR(birthday_at,6,2) = '08' then 'agust' end as month
from users where SUBSTR(birthday_at,6,2) in ('05','08');

```

users 1

select name, case when SUBSTR(birthday_at,6,2) = '1' | Век

Таблица	ABC name	ABC month	
1	Александр	may	
2	Мария	agust	

```

SELECT * FROM catalogs WHERE id IN (5, 1, 2);
SELECT * FROM catalogs WHERE id IN (5, 1, 2) order by case when id=5 then 1
                                                         when id =1 then 2
                                                         when id = 2 then 3 end;

```

catalogs 1

SELECT * FROM catalogs WHERE id IN (5, 1, 2) с

Таблица	123 id	ABC name	
1	5	Оперативная память	
2	1	Процессоры	
3	2	Материнские платы	

-- 3 --

```

select * from users;
select to_days(now());
select round(AVG((to_days(now())-to_days(birthday_at))/365.25),0) as age from users;

```

Результат 1

select round(AVG((to_days(now())-to_days(birthday_at))/36

Таблица	123 age	
1	32	

```
select * from users u ;
select dayname(concat(year(now()), '-', SUBSTRING(birthday_at,6,10))) as birthday_day, count(dayname(concat(year(now()),
 '-', SUBSTRING(birthday_at,6,10))) as days_number
from users group by birthday_day order by days_number desc;
```

Результат 1

`select dayname(concat(year(now()), '-', SUBSTRING(birthday_at,6,10))) as birthday_day, count(dayname(concat(year(now()), '-', SUBSTRING(birthday_at,6,10))) as days_number`

	ABC birthday_day	123 days_number
1	Tuesday	2
2	Sunday	2
3	Friday	1
4	Thursday	1

```
select name, birthday_at, concat(year(now()), '-', SUBSTRING(birthday_at,6,10)) as in_this_year,
       dayname(concat(year(now()), '-', SUBSTRING(birthday_at,6,10))) as birthday_day
from users order by birthday_at;
```

users 1

`select name, birthday_at, concat(year(now()), '-', SUBSTRING(birthday_at,6,10)) as in_this_year, dayname(concat(year(now()), '-', SUBSTRING(birthday_at,6,10))) as birthday_day`

	ABC name	birthday_at	ABC in_this_year	ABC birthday_day
1	Наталья	1984-11-12	2021-11-12	Friday
2	Сергей	1988-02-14	2021-02-14	Sunday
3	Мария	1992-08-29	2021-08-29	Sunday
4	Александр	1985-05-20	2021-05-20	Thursday
5	Геннадий	1990-10-05	2021-10-05	Tuesday
6	Иван	1998-01-12	2021-01-12	Tuesday

```
select exp(SUM(log(value))) from storehouses_products sp ;
```

Результат 1

`select exp(SUM(log(value))) from storehouses_products sp`

	123 exp(SUM(log(value)))
1	15 558 169 908 938 328 000