



## Добавление столбца в таблицу

```

kalidb⇒ alter table party_events add column test text;
ALTER TABLE
kalidb⇒ select * from party_events;
id | name | location | date | test
---+---+---+---+---
1 | Meeting | Moscow | 2022-03-22 |
2 | Conference | Saints-Peterburg | 2023-10-10 |
(2 rows)
  
```

## Удаление столбца из таблицы

```

kalidb⇒ alter table party_events drop column test;
ALTER TABLE
kalidb⇒ select * from party_events;
id | name | location | date
---+---+---+---
1 | Meeting | Moscow | 2022-03-22
2 | Conference | Saints-Peterburg | 2023-10-10
(2 rows)
  
```

## Чтение заданных столбцов из таблицы

```

kalidb⇒ select * from party_members;
id |      name      | age | gender | party_id |      belonging
---+-----+---+---+---+
  1 | Vasya Pupkin   |  35 | Male   |         1 | Moscow
  2 | Ivan           |  24 | Male   |         1 | Saints-Peterburg
  3 | Natasha        |  32 | Female |         1 | Voronezh
  4 | Masha          |  41 | Female |         1 | Minsk
  5 | Katya          |  32 | Female |         1 | Astana
(5 rows)

kalidb⇒ select * from party_members where age > 32;
id |      name      | age | gender | party_id |      belonging
---+-----+---+---+---+
  1 | Vasya Pupkin   |  35 | Male   |         1 | Moscow
  4 | Masha          |  41 | Female |         1 | Minsk
(2 rows)

```

## Чтение заданных строк из одиночной таблицы

```

kalidb⇒ select * from party_members where age not in (32);
id |      name      | age | gender | party_id |      belonging
---+-----+---+---+---+
  1 | Vasya Pupkin   |  35 | Male   |         1 | Moscow
  2 | Ivan           |  24 | Male   |         1 | Saints-Peterburg
  4 | Masha          |  41 | Female |         1 | Minsk
(3 rows)

```

Символ процента представляет последовательность одного или нескольких произвольных символов. Запрос, возвращающий строки городов, чьи названия начинаются с «М»:

```

kalidb⇒ select * from party_members where belonging like 'M%';
id |      name      | age | gender | party_id |      belonging
---+-----+---+---+---+
  1 | Vasya Pupkin   |  35 | Male   |         1 | Moscow
  4 | Masha          |  41 | Female |         1 | Minsk
(2 rows)

```

## Сортировка результатов

Если нужно отсортировать строки результата в алфавитном порядке, то используется конструкция ORDER BY:

```
kalidb⇒ select * from party_members order by name;
id | name | age | gender | party_id | belonging
---+---+---+---+---+---
2 | Ivan | 24 | Male | 1 | Saints-Peterburg
5 | Katya | 32 | Female | 1 | Astana
4 | Masha | 41 | Female | 1 | Minsk
3 | Natasha | 32 | Female | 1 | Voronezh
1 | Vasya Pupkin | 35 | Male | 1 | Moscow
(5 rows)
```

```
kalidb⇒ select * from party_members order by age;
id | name | age | gender | party_id | belonging
---+---+---+---+---+---
2 | Ivan | 24 | Male | 1 | Saints-Peterburg
3 | Natasha | 32 | Female | 1 | Voronezh
5 | Katya | 32 | Female | 1 | Astana
1 | Vasya Pupkin | 35 | Male | 1 | Moscow
4 | Masha | 41 | Female | 1 | Minsk
(5 rows)
```

**Ключевое слово DESC используется для сортировки по убыванию:**

```
kalidb⇒ select * from party_members order by age desc;
id | name | age | gender | party_id | belonging
---+---+---+---+---+---
4 | Masha | 41 | Female | 1 | Minsk
1 | Vasya Pupkin | 35 | Male | 1 | Moscow
3 | Natasha | 32 | Female | 1 | Voronezh
5 | Katya | 32 | Female | 1 | Astana
2 | Ivan | 24 | Male | 1 | Saints-Peterburg
(5 rows)
```

**Функция SUM вычисляет сумму значений числового столбца:**

```

kalidb⇒ select * from party_members order by age desc;
id | name | age | gender | party_id | belonging
---+---+---+---+---+
4 | Masha | 41 | Female | 1 | Minsk
1 | Vasya Pupkin | 35 | Male | 1 | Moscow
3 | Natasha | 32 | Female | 1 | Voronezh
5 | Katya | 32 | Female | 1 | Astana
2 | Ivan | 24 | Male | 1 | Saints-Peterburg
(5 rows)

kalidb⇒ select sum(age) from party_members;
sum
----
164
(1 row)

```

## Изменение данных

```

kalidb⇒ select * from attendance;
id | member_id | event_id | date_attended
---+---+---+---
7 | 2 | 1 | 2022-03-22
8 | 3 | 2 | 2023-10-10
9 | 5 | 2 | 2023-10-10
6 | 1 | 1 | 2022-03-22
(4 rows)

kalidb⇒ update attendance set date_attended = '2022-12-12' where id = 6;
UPDATE 1
kalidb⇒ select * from attendance;
id | member_id | event_id | date_attended
---+---+---+---
7 | 2 | 1 | 2022-03-22
8 | 3 | 2 | 2023-10-10
9 | 5 | 2 | 2023-10-10
6 | 1 | 1 | 2022-12-12
(4 rows)

```