

Раздел 4. Основные запросы SELECT

Видеокурс: <https://stepik.org/a/130488>

Выбор колонок

band

band_id	name	year	comment
303	The Beatles	1957	
93	Metallica	1981	
192	Queen	1970	UK rock group

```
SELECT *
```

```
FROM band
```

;

```
SELECT band_id, name, year, comment  
FROM band
```

;

```
SELECT band_id,  
      name,  
      year,  
      comment
```

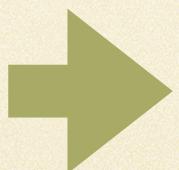
```
FROM band
```

;

Выражения (expressions)

band

band_id	name	year	comment
303	The Beatles	1957	
93	Metallica	1981	
192	Queen	1970	UK rock group



Результат

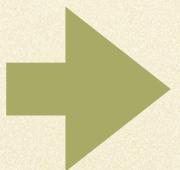
band_id	name	u_name
303	The Beatles	THE BEATLES
93	Metallica	METALLICA
192	Queen	QUEEN

```
SELECT band_id,  
       name,  
       upper(name) as u_name  
  FROM band  
;
```

Выбор строк

band

band_id	name	year	comment
303	The Beatles	1957	
93	Metallica	1981	
192	Queen	1970	UK rock group



Результат

band_id	name
93	Metallica

```
SELECT band_id, name  
FROM band  
WHERE band_id = 93
```

;

LIMIT

band

band_id	name	year	comment
303	The Beatles	1957	
93	Metallica	1981	
192	Queen	1970	UK rock group

```
SELECT *
  FROM band
 WHERE band_id = 93
```

```
SELECT *
  FROM band
```

```
SELECT *
  FROM band
 LIMIT 10
```

Выбор строк - OR (или)

band

band_id	name	year	comment
303	The Beatles	1957	
93	Metallica	1981	
192	Queen	1970	UK rock group



Результат

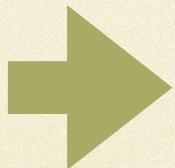
band_id	name
93	Metallica
192	Queen

```
SELECT band_id, name  
FROM band  
WHERE  
    band_id = 93  
OR band_id = 192  
;
```

Выбор строк - AND (И)

band

band_id	name	year	comment
303	The Beatles	1957	
93	Metallica	1981	
192	Queen	1970	UK rock group



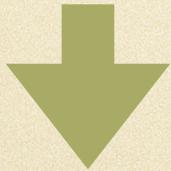
Результат

band_id	name	year	comment
192	Queen	1970	UK rock group

```
SELECT *
  FROM band
 WHERE
       year < 1980
 AND comment <> ""
;
```

band

band_id	name	year	comment
303	The Beatles	1957	
93	Metallica	1981	
192	Queen	1970	UK rock group



```
SELECT *
  FROM band
 WHERE band_id = 303
   OR (band_id = 93 AND year = 1981)
```

Результат 1

band_id	name	year	comment
303	The Beatles	1957	
93	Metallica	1981	

```
SELECT *
  FROM band
 WHERE (band_id = 303
   OR band_id = 93) AND year = 1981
```

Результат 2

band_id	name	year	comment
93	Metallica	1981	

band

band_id	name	year	comment
303	The Beatles	1957	
93	Metallica	1981	
192	Queen	1970	UK rock group



Результат 1

band_id	name	year	comment
303	The Beatles	1957	
93	Metallica	1981	

```
SELECT *
  FROM band
 WHERE band_id = 303
       OR band_id = 93 AND year = 1981
```



```
SELECT *
  FROM band
 WHERE band_id = 303
       OR (band_id = 93 AND year = 1981)
```



Несколько условий OR -> IN

band

band_id	name	year
303	The Beatles	1957
93	Metallica	1981
192	Queen	1970

```
SELECT band_id, name  
FROM band
```

WHERE

band_id = 303

OR band_id = 93

OR band_id = 192

;

Результат

band_id	name
303	The Beatles
93	Metallica
192	Queen

```
SELECT band_id, name
```

FROM band

WHERE

band_id IN (303, 93, 192)

;

band

band_id	name	year
303	The Beatles	1957
93	Metallica	1981
192	Queen	1970

NOT IN

```
SELECT band_id, name  
FROM band
```

WHERE

band_id <> 2

AND band_id <> 3

AND band_id <> 192

;

```
SELECT band_id, name
```

FROM band

WHERE

band_id NOT IN (2, 3, 192)

;

Результат

band_id	name
303	The Beatles
93	Metallica

band

band_id	name	year
303	The Beatles	1957
93	Metallica	1981
192	Queen	1970

IN с подзапросом

```

SELECT band_id, name, year
FROM band
WHERE
band_id IN (303, 93)
;
```

Результат

band_id	name	year
303	The Beatles	1957
93	Metallica	1981

list1

id
303
93

```

SELECT band_id, name, year
FROM band
WHERE
band_id IN (SELECT id
FROM list1
)
```

band

band_id	name	year
303	The Beatles	1957
93	Metallica	1981
192	Queen	1970

BETWEEN

```
SELECT band_id, name, year  
FROM band  
WHERE  
    year BETWEEN 1970 and 1981  
;
```

Результат

band_id	name	year
93	Metallica	1981
192	Queen	1970

```
SELECT band_id, name, year  
FROM band  
WHERE  
    year >= 1970  
    AND year <= 1981  
;
```

NOT

```
SELECT *  
FROM band  
WHERE  
    NOT (band_id = 2)
```



```
SELECT *  
FROM band  
WHERE  
    band_id <> 2
```

```
SELECT *  
FROM band  
WHERE  
    NOT (band_id BETWEEN 2 and 6)
```



```
SELECT *  
FROM band  
WHERE  
    band_id < 2 OR band_id > 6
```

...
band_id **NOT BETWEEN** 2 and 6

Вложенные SELECT'ы

В условии WHERE - подзапрос

```
SELECT *  
      FROM band  
     WHERE  
band_id IN (SELECT id  
              FROM list1  
            )
```

В части FROM - вложенные Select'ы

```
SELECT *  
      FROM  
        (SELECT band_id, name  
              FROM band  
             WHERE year >= 1980  
            ) as p  
     WHERE  
p.band_id between 10 and 20
```

Комментарии

Однострочные:

```
SELECT band_id,  
      name  
   FROM band  
 WHERE name='Metallica' -- Take only Metallica  
;
```

Многострочные:

```
/*  
SELECT band_id,  
      name  
   FROM band  
; */
```