

ОПЕРАТОР SELECT

УЧЕБНЫЙ КУРС «ОСНОВЫ SQL»

ОПЕРАТОР SELECT

```
SELECT * FROM superheroes
```

ТАБЛИЦА СУПЕРГЕРОЕВ

id	name	align	eye	hair	gender	appearances	year	universe
1	Spider-Man (Peter Parker)	Good Characters	Hazel Eyes	Brown Hair	Male Characters	4043	1962	marvel
2	Captain America (Steven Rogers)	Good Characters	Blue Eyes	White Hair	Male Characters	3360	1941	marvel
4854	Batman (Bruce Wayne)	Good Characters	Blue Eyes	Black Hair	Male Characters	3093	1939	dc
3	Wolverine (James \"Logan\" Howlett)	Neutral Characters	Blue Eyes	Black Hair	Male Characters	3061	1974	marvel
4	Iron Man (Anthony \"Tony\" Stark)	Good Characters	Blue Eyes	Black Hair	Male Characters	2961	1963	marvel
4855	Superman (Clark Kent)	Good Characters	Blue Eyes	Black Hair	Male Characters	2496	1986	dc
5	Thor (Thor Odinson)	Good Characters	Blue Eyes	Blond Hair	Male Characters	2258	1950	marvel
6	Benjamin Grimm (Earth-616)	Good Characters	Blue Eyes	No Hair	Male Characters	2255	1961	marvel
			...					

ОПЕРАТОР SELECT

```
SELECT * FROM superheroes
```

РЕЗУЛЬТАТ ВЫПОЛНЕНИЯ SELECT

id	name	align	eye	hair	gender	appearances	year	universe
1	Spider-Man (Peter Parker)	Good Characters	Hazel Eyes	Brown Hair	Male Characters	4043	1962	marvel
2	Captain America (Steven Rogers)	Good Characters	Blue Eyes	White Hair	Male Characters	3360	1941	marvel
3	Wolverine (James \"Logan\" Howlett)	Neutral Characters	Blue Eyes	Black Hair	Male Characters	3061	1974	marvel
4	Iron Man (Anthony \"Tony\" Stark)	Good Characters	Blue Eyes	Black Hair	Male Characters	2961	1963	marvel
5	Thor (Thor Odinson)	Good Characters	Blue Eyes	Blond Hair	Male Characters	2258	1950	marvel
6	Benjamin Grimm (Earth-616)	Good Characters	Blue Eyes	No Hair	Male Characters	2255	1961	marvel
7	Reed Richards (Earth-616)	Good Characters	Brown Eyes	Brown Hair	Male Characters	2072	1961	marvel
8	Hulk (Robert Bruce Banner)	Good Characters	Brown Eyes	Brown Hair	Male Characters	2017	1962	marvel
			...					

ВЫБОР СТОЛБЦОВ В SELECT

```
SELECT name, appearances  
FROM superheroes
```

ВЫБОР СТОЛБЦОВ В SELECT

name	appearances
Spider-Man (Peter Parker)	4043
Captain America (Steven Rogers)	3360
Wolverine (James \"Logan\" Howlett)	3061
Iron Man (Anthony \"Tony\" Stark)	2961
Thor (Thor Odinson)	2258
Benjamin Grimm (Earth-616)	2255
Reed Richards (Earth-616)	2072
Hulk (Robert Bruce Banner)	2017
...	

ВЫБОР СТОЛБЦОВ В SELECT

SQL Shell (psql)

```
postgres=# SELECT name, appearances FROM superheroes;
```

name	appearances
Spider-Man (Peter Parker)	4043
Captain America (Steven Rogers)	3360
Wolverine (James \"Logan\" Howlett)	3061
Iron Man (Anthony \"Tony\" Stark)	2961
Thor (Thor Odinson)	2258
Benjamin Grimm (Earth-616)	2255
Reed Richards (Earth-616)	2072
Hulk (Robert Bruce Banner)	2017
Scott Summers (Earth-616)	1955
Jonathan Storm (Earth-616)	1934
Henry McCoy (Earth-616)	1825
Susan Storm (Earth-616)	1713
Ororo Munroe (Earth-616)	1512
Clinton Barton (Earth-616)	1394
Matthew Murdock (Earth-616)	1338
Stephen Strange (Earth-616)	1307
Mary Jane Watson (Earth-616)	1304
John Jonah Jameson (Earth-616)	1266
Robert Drake (Earth-616)	1265
Henry Pym (Earth-616)	1237
Charles Xavier (Earth-616)	1233
Warren Worthington III (Earth-616)	1230
Piotr Rasputin (Earth-616)	1162
Wanda Maximoff (Earth-616)	1161
Nicholas Fury (Earth-616)	1137

ПСЕВДОНИМЫ СТОЛБЦОВ В SELECT

```
SELECT name AS hero_name,  
        appearances  
FROM superheroes
```

ПСЕВДОНИМЫ СТОЛБЦОВ В SELECT

hero_name	appearances
Spider-Man (Peter Parker)	4043
Captain America (Steven Rogers)	3360
Wolverine (James \"Logan\" Howlett)	3061
Iron Man (Anthony \"Tony\" Stark)	2961
Thor (Thor Odinson)	2258
Benjamin Grimm (Earth-616)	2255
Reed Richards (Earth-616)	2072
Hulk (Robert Bruce Banner)	2017
...	

ПСЕВДОНИМЫ СТОЛБЦОВ В SELECT

```
SELECT name hero_name,  
        appearances  
FROM superheroes
```

ВЫБОР УНИКАЛЬНЫХ ЗНАЧЕНИЙ СТОЛБЦОВ В SELECT

```
SELECT DISTINCT (align)  
FROM superheroes
```

ВЫБОР УНИКАЛЬНЫХ ЗНАЧЕНИЙ СТОЛБЦОВ В SELECT

```
SELECT DISTINCT (align)
FROM superheroes
```

align
Good Characters
Neutral Characters
Reformed Criminals
Bad Characters

ВЫБОР УНИКАЛЬНЫХ ЗНАЧЕНИЙ СТОЛБЦОВ В SELECT

```
SELECT DISTINCT (eye)  
FROM superheroes
```

eye
Black Eyeballs
One Eye
Purple Eyes
Orange Eyes
... (24 строки)

ОГРАНИЧЕНИЕ КОЛИЧЕСТВА ИЗВЛЕКАЕМЫХ СТРОК

```
SELECT DISTINCT(hair)  
FROM superheroes  
LIMIT 10
```

ОГРАНИЧЕНИЕ КОЛИЧЕСТВА ИЗВЛЕКАЕМЫХ СТРОК

hair
Strawberry Blond Hair
Violet Hair
Green Hair
Bald
Silver Hair
Light Brown Hair
Red Hair
White Hair
Purple Hair
Reddish Blond Hair

SQL - ДЕКЛАРАТИВНЫЙ ЯЗЫК

```
SELECT DISTINCT(align)  
FROM superheroes
```

align
Good Characters
Neutral Characters
Reformed Criminals
Bad Characters

ИТОГИ



Оператор SELECT

Извлечение данных из таблиц реляционной базы



Ключевое слово FROM

Источник данных



Ключевое слово DISTINCT

Выбор уникальных значений в столбцах



Ключевое слово LIMIT

Ограничение количества извлекаемых строк



Ключевое слово AS

Создание псевдонима