

ВСТАВКА И ИЗМЕНЕНИЕ ДАННЫХ В SQL

УЧЕБНЫЙ КУРС «ОСНОВЫ SQL»

СОЗДАНИЕ ТАБЛИЦ В SQL

```
CREATE TABLE superheroes(  
    id SERIAL PRIMARY KEY,  
    name VARCHAR(100),  
    align VARCHAR(30),  
    eye VARCHAR(30),  
    hair VARCHAR(30),  
    gender VARCHAR(30),  
    appearances INT,  
    year INT,  
    universe VARCHAR(10)  
)
```

ВСТАВКА ДАННЫХ В ТАБЛИЦУ

```
INSERT INTO superheroes(name, appearances, universe)  
VALUES ('Spider-Man', 4043, 'marvel')
```

ТАБЛИЦА СУПЕРГЕРОЕВ

id	name	align	eye	hair	gender	appearances	year	universe
1	Spider-Man					4043		marvel

ВСТАВКА ДАННЫХ В ТАБЛИЦУ

```
INSERT INTO superheroes(name, align, eye, hair,  
gender, appearances, year, universe)  
VALUES ('Spider-Man (Peter Parker)', 'Good  
Characters', 'Hazel Eyes', 'Brown Hair',  
'Male Characters', 4043, 1962, 'marvel')
```

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

ВСТАВКА ДАННЫХ В ТАБЛИЦУ

```
INSERT INTO superheroes(id, name, align, eye, hair,  
gender, appearances, year, universe)  
VALUES (1, 'Spider-Man (Peter Parker)', 'Good  
Characters', 'Hazel Eyes', 'Brown Hair',  
'Male Characters', 4043, 1962, 'marvel')
```

ВСТАВКА ДАННЫХ В ТАБЛИЦУ

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INSERT INTO superheroes  
VALUES (1, 'Spider-Man (Peter Parker)', 'Good  
Characters', 'Hazel Eyes', 'Brown Hair',  
'Male Characters', 4043, 1962, 'marvel')
```


ИЗМЕНЕНИЕ ДАННЫХ В ТАБЛИЦЕ

```
UPDATE superheroes  
SET name='Batman',  
    universe='dc'  
WHERE id=1
```

ТАБЛИЦА СУПЕРГЕРОЕВ

id	name	align	eye	hair	gender	appearances	year	universe
1	Batman	Good Characters	Hazel Eyes	Brown Hair	Male Characters	4043	1962	dc

ИЗМЕНЕНИЕ ДАННЫХ В ТАБЛИЦЕ

```
UPDATE superheroes  
SET gender='Man',  
WHERE gender='Male Characters'
```

ТАБЛИЦА СУПЕРГЕРОЕВ

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

УДАЛЕНИЕ ДАННЫХ ИЗ ТАБЛИЦЫ

```
DELETE FROM superheroes  
WHERE id=2
```

ТАБЛИЦА СУПЕРГЕРОЕВ

id	name	align	eye	hair	gender	appearances	year	universe
1	Spider-Man (Peter Parker)	Good Characters	Hazel Eyes	Brown Hair	Man	4043	1962	marvel
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4855	Superman (Clark Kent)	Good Characters	Blue Eyes	Black Hair	Man	2496	1986	dc
5	Thor (Thor Odinson)	Good Characters	Blue Eyes	Blond Hair	Man	2258	1950	marvel
6	Benjamin Grimm (Earth-616)	Good Characters	Blue Eyes	No Hair	Man	2255	1961	marvel
			...					

УДАЛЕНИЕ ДАННЫХ ИЗ ТАБЛИЦЫ

```
DELETE FROM superheroes  
WHERE gender='Male Characters'
```

УДАЛЕНИЕ ВСЕХ ДАННЫХ

```
DELETE FROM superheroes
```


ПЕРВИЧНЫЙ КЛЮЧ

id	name	align	eye	hair	gender	appearances	year	universe
1	Spider-Man (Peter Parker)	Good Characters	Hazel Eyes	Brown Hair	Man	4043	1962	marvel
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ИТОГИ

➤ **Вставка данных в таблицы**

Оператор INSERT

➤ **Изменение данных в таблице**

Оператор UPDATE

➤ **Удаление данных из таблиц**

Оператор DELETE

➤ **Особенности**

Один оператор может менять несколько строк данных

Фильтры в WHERE такие же, как в SELECT

Первичный ключ позволяет однозначно идентифицировать строки