

Databázové systémy

SQL – CTE

Common Table Expressions

<https://www.postgresql.org/docs/current/static/queries-with.html>

- Niečo ako View, ktoré platí počas vykonávania statementu

WITH table_name AS (...)

Recursive queries

```
WITH RECURSIVE products_tree AS (  
  SELECT id, label, parent_id  
    FROM hierarchy.products  
   where id = 3  
 UNION ALL  
  SELECT p.id, p.label, p.parent_id  
    FROM hierarchy.products p  
   JOIN products_tree pt ON p.parent_id = pt.id  
)  
SELECT * FROM products_tree;
```

Menenie dát cez WITH

```
WITH moved_rows AS (  
    DELETE FROM products  
    WHERE  
        "date" >= '2010-10-01' AND  
        "date" < '2010-11-01'  
    RETURNING *  
)  
INSERT INTO products_log  
SELECT * FROM moved_rows;
```

Dá sa aj bez returning...

```
WITH t AS (  
    DELETE FROM foo  
)  
DELETE FROM bar;
```

Zhrnutie

- CTE Vám môže pomôcť upratať vaše queries
- Rekurzívna špecialita
 - Prehľadávanie stromov, grafov...na jednu query