

## POSTGRESQL RECURSIVE QUERY USING CTEs

```

1  -- create a new table
2  CREATE TABLE employees (
3      employee_id serial PRIMARY KEY,
4      full_name VARCHAR NOT NULL,
5      manager_id INT);
6  -- inserts sample data into the employees table
7  INSERT INTO employees (
8      employee_id,
9      full_name,
10     manager_id
11 )
12 VALUES
13     (1, 'Michael North', NULL),
14     (2, 'Megan Berry', 1),
15     (3, 'Sarah Berry', 1),
16     (4, 'Zoe Black', 1),
17     (5, 'Tim James', 1),
18     (6, 'Bella Tucker', 2),
19     (7, 'Ryan Metcalfe', 2),
20     (8, 'Max Mills', 2),
21     (9, 'Benjamin Glover', 2),
22     (10, 'Carolyn Henderson', 3),
23     (11, 'Nicola Kelly', 3),
24     (12, 'Alexandra Climo', 3),
25     (13, 'Dominic King', 3),
26     (14, 'Leonard Gray', 4),
27     (15, 'Eric Rampling', 4),
28     (16, 'Piers Paige', 7),
29     (17, 'Ryan Henderson', 7),
30     (18, 'Frank Tucker', 8),
31     (19, 'Nathan Ferguson', 8),
32     (20, 'Kevin Rampling', 8);

```

```
1 --This query returns all subordinates of the manager with the id 2.
2 WITH RECURSIVE subordinates AS (
3     SELECT
4         employee_id,
5         manager_id,
6         full_name
7     FROM
8         employees
9     WHERE
10        employee_id = 2
11    UNION
12        SELECT
13            e.employee_id,
14            e.manager_id,
15            e.full_name
16        FROM
17            employees e
18        INNER JOIN subordinates s ON s.employee_id = e.manager_id
19 ) SELECT
20     *
21 FROM
22     subordinates;
```