

CTE

Enkele CTE

```
WITH CTE_Doelpunt AS (  
    SELECT *  
    FROM Doelpunt  
    WHERE ScoreMinuten = 90  
)  
  
SELECT *  
FROM CTE_Doelpunt
```

CTE RECURSION

```
WITH numbers (number) AS (  
    SELECT 1  
    UNION ALL  
    SELECT number + 1  
    FROM numbers  
    WHERE number < 999  
)  
  
SELECT *  
FROM numbers  
OPTION (MAXRECURSION 1000);
```

Traversing a hierarchical structure

```
WITH Bosses(boss, emp) AS  
( SELECT ReportsTo, EmployeeID  
  FROM Employees  
  WHERE ReportsTo IS NULL  
  UNION ALL  
  SELECT e.ReportsTo, e.EmployeeID  
  FROM Employees e INNER JOIN Bosses b ON e.ReportsTo = b.emp  
)  
  
SELECT * FROM Bosses  
ORDER BY boss, emp;
```

Drawing hierarchy structure

```
WITH Bosses(boss, emp, title, level, path) AS (  
    -- Base case: Top-level employees with no boss  
    SELECT ReportsTo, EmployeeID, Title, 1, CONVERT(varchar(max), Title)  
    FROM Employees  
    WHERE ReportsTo IS NULL  
    UNION ALL  
    -- Recursive case: Employees reporting to a boss  
    SELECT e.ReportsTo, e.EmployeeID, e.Title, b.level + 1,  
           CONVERT(varchar(max), b.path + '<--' + e.Title)  
    FROM Employees e INNER JOIN Bosses b ON e.ReportsTo = b.emp  
)  
-- Final query to get all results  
SELECT * FROM Bosses  
ORDER BY boss, emp;
```