# Common Table Expression in SQL: Takeaways

## Syntax

- Writing a simple CTE

```
WITH
 cte_name AS (
  SELECT definition
 )
 SELECT definition using cte_name
```

- Writing multiple CTE definitions

```
WITH
 cte_name_1 AS (
  SELECT definition 1
 ),
 cte_name_2 AS (
  SELECT definition 2
 ),
 ...,
 cte_name_n AS (
  SELECT definition 1
 )
 SELECT definition using CTEs
```

- Writing recursive CTEs

```
WITH RECURSIVE
 cte_name AS (
  Initialization query definition
  compound-operator
  recursive query definition using cte_name
 )
 SELECT definition using cte_name
```

## Concepts

- A Common Table Expression (CTE) allows us to give a name to a subquery like an alias.

- We use CTEs with the `WITH` clause.

- A Recursive CTE is a query that calls itself.

## Resources

- [CTE](#)