



# Day 6

# Correlated

# Subquery





# SQL Correlated Subqueries

- **Correlated subqueries** are subqueries that reference one or more columns in the main query.
- **Correlated subqueries** depend on information in the main query to run, and thus, cannot be executed on their own.
- **Correlated subqueries** are used for row-by-row processing.



# General Syntax :

```
SELECT column1, column2, ...
FROM table1 outer
WHERE column1 operator
      (SELECT column1, column2
       FROM table2
       WHERE expr1 = outer.expr2 );
```

# Simple vs Correlated Subqueries

## Simple Subquery

- Can be run independently from the main query.
- Evaluated once in the whole query.

## Correlated Subquery

- Dependent on the main query to execute.
- Each subquery is executed once for every row of the outer query.