

# Dataman - SQL Pattern - SoSe 23

## Query on one Table

```
select column1, column2, column3 as name
from table
where left=right;
```

## Join of two Tables

```
select column1, column2, column3 as name
from table1 t1
    join table2 t2 on t2.column=t1.column
where left=right;
```

## Aggregation

```
select
    sum(column) as total ,
    avg(column) as mean,
    count(*) as number_of
from table
where left=right;
```

## Aggregation with Join

```
select column1, column2, sum(column3) as
total , count(*) as number_of
from table t1
    join table2 t2 on t2.column=t1.column
group by column1, column2
having count(*) = 10
```

## Subquery in Where Part

```
select column1, column2
from table
where left = (
    subquery here
)
```

## Query on one Table with null Condition

```
select column1, column2, column3 as name
from table
where column is null;
```

## Join of three Tables

```
select column1, column2, column3 as name
from table1 t1
    join table2 t2 on t2.column=t1.column
    join table3 t3 on t3.column=t2.column
where left=right;
```

## Aggregation with Grouping

```
select column1, column2, sum(column3) as
total , count(*) as number_of
from table
group by column1, column2
```

## Subquery in Select Part

```
select column1, (subquery here)
from table
where left = right
```

## Join of four Tables

```
select column1, column2, column3 as name
from table1 t1
    join table2 t2 on t2.column=t1.column
    join table3 t3 on t3.column=t2.column
    join table4 t4 on t4.column=t3.column
where left=right;
```

## Aggregation with Condition on Group Level

```
select column1, column2, sum(column3) as
total , count(*) as number_of
from table
group by column1, column2
having count(*) = 10
```

## Subquery in From Part

```
select column1, column2
from
    table t1
    join
        (subquery here) t2
    on t2.column=t1.column
where left = right
```