# SET Operations in SQL

SQL supports few Set operations which can be performed on the table data. These are used to get meaningful results from data stored in the table, under different special conditions.

In this tutorial, we will cover 4 different types of SET operations, along with example:

1. UNION
2. UNION ALL
3. INTERSECT
4. MINUS

UNION Operation

UNION is used to combine the results of two or more `SELECT` statements. However it will eliminate duplicate rows from its resultset. In case of union, number of columns and datatype must be same in both the tables, on which UNION operation is being applied.
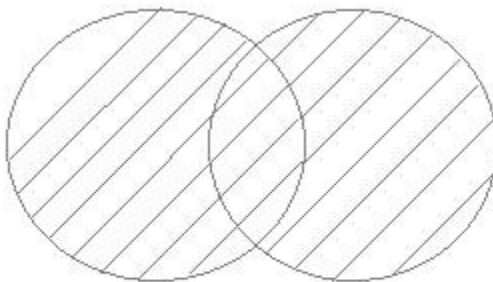
Example of UNION

The **First** table,

ID	Name

1	abhi
2	adam

The **Second** table,

ID	Name
2	adam
3	Chester

Union SQL query will be,

```
SELECT * FROM First
UNION
SELECT * FROM Second;
```

The resultset table will look like,

ID	NAME
1	abhi
2	adam
3	Chester

UNION ALL

This operation is similar to Union. But it also shows the duplicate rows.
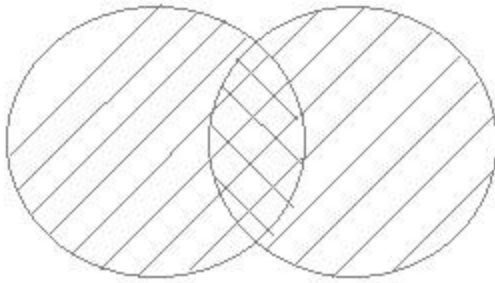
Example of Union All

The **First** table,

ID	NAME
1	abhi
2	adam

The **Second** table,

ID	NAME
2	adam
3	Chester

Union All query will be like,

```
SELECT * FROM First
UNION ALL
SELECT * FROM Second;
```

The resultset table will look like,

ID	NAME
1	abhi
2	adam
2	adam
3	Chester

INTERSECT

Intersect operation is used to combine two `SELECT` statements, but it only retuns the records which are common from both `SELECT` statements. In case of **Intersect** the number of columns and datatype must be same.

NOTE: MySQL does not support INTERSECT operator.
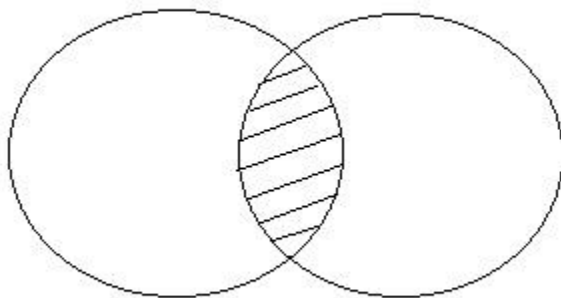
Example of Intersect

The **First** table,

ID	NAME

1	abhi
2	adam

The **Second** table,

ID	NAME
2	adam
3	Chester

Intersect query will be,

```sql
SELECT * FROM First
INTERSECT
SELECT * FROM Second;
```

The resultset table will look like

ID	NAME
2	adam

MINUS

The Minus operation combines results of two `SELECT` statements and return only those in the final result, which belongs to the first set of the result.
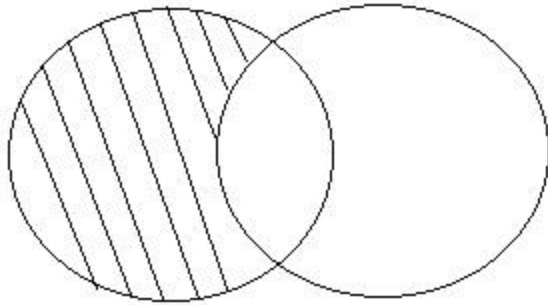
Example of Minus

The **First** table,

ID	NAME
1	abhi
2	adam

The **Second** table,

ID	NAME
2	adam
3	Chester

Minus query will be,

```
SELECT * FROM First
MINUS
SELECT * FROM Second;
```

The resultset table will look like,

ID	NAME
1	abhi