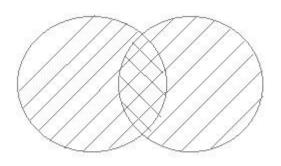
# Structure Query Language (SQL)

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## 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**

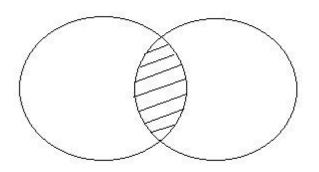
select \* from second

The result table will look like,

ID	NAME
1	abhi
2	adam
2	adam
3	Chester

## 6.17. Intersect

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

select \* from First

#### INTERSECT

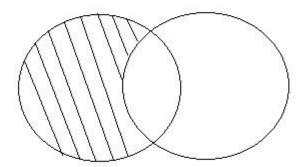
select \* from second

The result table will look like

ID	NAME
2	adam

## 6.17.4 Minus

Minus operation combines result of two Select statements and return only those result which belongs to first set of result. MySQL does not support INTERSECT operator.



## **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 result table will look like,

ID	NAME
1	Abhi

## 6.18 SQL Sequence

Sequence is a feature supported by some database systems to produce unique values on demand. Some DBMS like **MySQL** supports AUTO\_INCREMENT in place of Sequence. AUTO\_INCREMENT is applied on columns, it automatically increments the column value by 1 each time a new record is entered into the table. Sequence is also somewhat similar to AUTO\_INCREMENT but its has some extra features.

## **Creating Sequence**

Syntax to create sequences is,

CREATE Sequence sequence-name

start with initial-value

increment by increment-value

maxvalue maximum-value

cycle | nocycle

initial-value specifies the starting value of the Sequence, incrementvalue is the value by which sequence will be incremented and maxvalue specifies the maximum value until which sequence will increment itself.cycle specifies that if the maximum value exceeds the set limit, sequence will restart its cycle from the begining. No cycle specifies that if sequence exceeds maxvalue an error will be thrown.

## **Example to create Sequence**

The sequence query is following

CREATE Sequence seq\_1

start with 1

increment by 1

maxvalue 999

cycle ;

#### **Example to use Sequence**

The class table,

ID	NAME
1	abhi
2	adam
4	alex

The sql query will be,

INSERT into class value(seq\_1.nextval,'anu');

Result table will look like,

ID	NAME
1	abhi
2	adam
4	Alex
1	Anu

Once you use **nextval** the sequence will increment even if you don't Insert any record into the table.

## 6.19 SQL View

A view in SQL is a logical subset of data from one or more tables. View is used to restrict data access.

Syntax for creating a View,

CREATE or REPLACE **view** *view\_name* AS

SELECT column\_name(s)

FROM table\_name

WHERE condition

## Example of Creating a View

Consider following Sale table,

Oid	order_name	previous_balance	Customer
11	ord1	2000	Alex
12	ord2	1000	Adam
13	ord3	2000	Abhi
14	ord4	1000	Adam
15	ord5	2000	Alex

SQL Query to Create View

CREATE or REPLACE **view** sale\_view as select \* from Sale where custome r = 'Alex';

The data fetched from select statement will be stored in another object called **sale\_view**. We can use create seperately and replace too but using both together works better.

## Example of Displaying a View

Syntax of displaying a view is similar to fetching data from table using Select statement.

SELECT \* from sale\_view;

## 6.19.1 Force View Creation

force keyword is used while creating a view. This keyword force to create View even if the table does not exist. After creating a force View if we create the base table and enter values in it, the view will be automatically updated.

Syntax for forced View is, CREATE or REPLACE force view view\_name AS SELECT column\_name(s) FROM table\_name WHERE condition

## 6.19.2 Update a View

Update command for view is same as for tables.

Syntax to Update a View is,

UPDATE view-name

set value

WHERE condition;

If we update a view it also updates base table data automatically.

## 6.19.3 Read-Only View

We can create a view with read-only option to restrict access to the view.

Syntax to create a view with Read-Only Access

CREATE or REPLACE force view view\_name AS

SELECT column\_name(s)

FROM table\_name

WHERE *condition* with **read-only** 

The above syntax will create view for read-only purpose, we cannot Update or Insert data into read-only view. It will throw an error.

## **Types of View**

There are two types of view,

- Simple View
- Complex View

Simple View	Complex View
Created from one table	Created from one or more table
Does not contain functions	Contain functions
Does not contain groups of data	Contains groups of data