

# UNION ALL

**SQL UNION ALL** command combines the result of **two or more SELECT statements** in SQL.

For performing the UNION ALL operation, it is necessary that both the SELECT statements should have an equal number of columns/fields otherwise the resulting expression will result in an error.

## Syntax

The syntax for the SQL UNION ALL operation is:

```
SELECT columns FROM table1
UNION ALL
SELECT columns FROM table2;
```

## SQL Union All vs UNION

SQL UNION ALL operator is different from UNION as the UNION operator removes duplicates and UNION ALL does not.

## SQL UNION ALL Examples

Let's look at some examples of the UNION ALL command in SQL to understand its working.

First, let's create a demo SQL database and table on which UNION ALL will be performed.

### Demo SQL Database

In this tutorial on the UNION ALL operator, we will use the following table in examples.

#### STUDENTS table

ROLL_NO	NAME	DOB	AGE
1	DEV SHARMA	2001-08-16	17
2	AMAN VERMA	2002-01-04	16
3	KRISH VATSA	2000-11-29	18

#### TRIP\_DETAIL Table

ROLL_NO	NAME	DOB	AGE
1	DEV SHARMA	2001-08-16	17
2	AMAN VERMA	2002-01-04	16

3	KRISH VATSA	2000-11-29	18
4	VARUN GOYAL	2003-09-21	15

To create these tables on your system, write the following SQL query.

```
CREATE TABLE STUDENTS
(
    ROLL_NO INT,
    NAME VARCHAR(20) ,
    DOB DATE,
    AGE INT(2)
);
CREATE TABLE TRIP_DETAIL
(
    ROLL_NO INT,
    NAME VARCHAR(20) ,
    DOB DATE,
    AGE INT(2)
);
INSERT INTO STUDENTS
VALUES
    (1,"DEV SHARMA","2001-08-16",17) ,
    (2,"AMAN VERMA","2002-01-04",16) ,
    (3,"KRISH VATSA","2000-11-29",18) ;
INSERT INTO TRIP_DETAIL
VALUES
    (1,"DEV SHARMA","2001-08-16",17) ,
    (2,"AMAN VERMA","2002-01-04",16) ,
    (3,"KRISH VATSA","2000-11-29",18) ,
    (4,"VARUN GOYAL","2003-09-21",15) ;
```

## SQL UNION ALL Example

Lets look at an example of UNION ALL operator in SQL. This example demonstrate how to use the SQL UNION ALL operator in SQL query and help to practice UNION ALL.

```
SELECT * FROM STUDENTS
UNION ALL
SELECT * FROM TRIP_DETAIL;
```

Output

```
mysql> SELECT * FROM STUDENTS
-> UNION ALL
-> SELECT * FROM TRIP_DETAIL;
```

ROLL_NO	NAME	DOB	AGE
1	DEV SHARMA	2001-08-16	17
2	AMAN VERMA	2002-01-04	16
3	KRISH VATSA	2000-11-29	18
1	DEV SHARMA	2001-08-16	17
2	AMAN VERMA	2002-01-04	16
3	KRISH VATSA	2000-11-29	18
4	VARUN GOYAL	2003-09-21	15

7 rows in set (0.01 sec)

```
mysql> |
```

*Performing UNION ALL*

## Important Points About SQL UNION All

- UNION ALL command helps us to combine results of two or more SELECT statements from different tables.
- The UNION ALL command includes the duplicate records from the SELECT statements whereas the UNION command does not include duplicate records otherwise both the commands are same.
- For performing the UNION ALL operation, it is necessary that both the SELECT statements should have equal number of columns otherwise the resulting expression will result in an error.

## Union All Operator – FAQs

### What is UNION ALL command?

UNION ALL command obtains combined records of two or more SELECT statement from two or more than two tables.

### Is duplicates records allowed in UNION ALL?

Yes, duplicates records are allowed in the UNION ALL command but not in UNION command.

### Is it necessary to have same number of columns in all SELECT queries of UNION ALL?

Yes, it necessary to have same number of columns in all SELECT queries otherwise an error will occur.

