

Module : 12 SET operator

USE June_Batch_DB

Set operators are used to combine results from two or more SELECT statements. results of the queries must have the same column name, same column order and the types of columns must be compatible.

There are the following 4 set operators in SQL Server:

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

1. UNION

The Union operator is used to combine the result-set of two or more SELECT statements or Table.

The UNION operator selects distinct values by default.

Example :

A =[1,2,3,4,5]

B =[3,4,5,6,7]

A union B - O/P = [1,2,3,4,5,6,7]

```
create table set1(  
S_ID int,  
SNAME varchar(20)  
);
```

```
create table set2(  
S_ID int,  
SNAME varchar(20)  
);  
insert into set1 values(1, 'A')  
insert into set1 values(2, 'B')  
insert into set1 values(3, 'C')  
insert into set1 values(4, 'D')  
insert into set2 values(5, 'E')  
insert into set2 values(6, 'F')  
insert into set2 values(7, 'G')  
insert into set1 values(8, 'H')  
insert into set2 values(9, 'I')  
insert into set2 values(3, 'C')  
insert into set2 values(4, 'J')
```

```
SELECT * FROM set1  
SELECT * FROM set2
```

```
SELECT s_id, sname FROM set1  
UNION  
SELECT s_id, sname FROM set2
```

2. Union All

This operator is used to combine two or more tables using select statement when both the tables have same no of columns.

Combine the two or more tables with all the values. it means that it will allow duplicate values in it.

```
select * from set1
select * from set2
```

```
select * from set2
Union all
select * from set1
```

3. Intersection

It will return only distinct (common records) values from two or more tables.

```
select * from set1
select * from set2
```

```
select * from set1
intersect
select * from set2
```

4. Except/minus

It will display the difference in records.

For ex: A = [1,2,3,4] and B = [3,4,5,6]

then A except B - O/P = [1,2]

then B except A - O/P = [5,6]

```
select * from set1
except
select * from set2
```

```
select * from set2
except
select * from set1
```

Difference between JOIN and UNION

UNION combines the result-set of two or more select queries into a single result-set which includes all the rows from all the queries in the union.

whereas, JOINS retrieve data from two or more tables based on logical relationships between the tables.

In short, UNION combines rows from 2 or more tables, where JOINS combine columns from 2 or more table.