SQL UNION, UNION ALL

SQL UNION clause combines same column(s) name values from two or more table and eliminates duplicate value.

SQL UNION clause is useful when you want to select distinct values (in selected columns) from the tables

SQL UNION vs UNION ALL

SQL UNION clause used to select distinct values from the tables...

SQL UNION ALL clause used to select all values including duplicates from the tables.

Performance difference between UNION vs UNION ALL - SQL engine do some additional work for removing do additional work to eliminates the duplicated rows.

UNION clause does not support BLOB or CLOB data type columns where as the UNION ALL support this data types.

Examples

Considering following product, out_of_stock_product is our example table. Both table have same column name product name. Execute this for creating table.

Example Table

```
CREATE TABLE product(
  category id number(3),
  product_name VARCHAR(25)
);
INSERT INTO product VALUES (1, 'Nokia');
INSERT INTO product VALUES (2, 'Samsung');
INSERT INTO product VALUES (3, 'HP');
INSERT INTO product VALUES (4, 'Dell');
INSERT INTO product VALUES (5, 'Apple');
INSERT INTO product VALUES (6, 'Nikon');
INSERT INTO product VALUES (7, 'Playstation');
CREATE TABLE out_of_stock_product(
  category_id number(3),
 product_name VARCHAR(25)
);
INSERT INTO out_of_stock_product VALUES (1, 'Samsung');
INSERT INTO out of stock product VALUES (2, 'LG');
INSERT INTO out_of_stock_product VALUES (3,'HTC');
INSERT INTO out_of_stock_product VALUES (4, 'HP');
INSERT INTO out_of_stock_product VALUES (5,'Dell');
INSERT INTO out of stock product VALUES (6, 'Apple');
INSERT INTO out_of_stock_product VALUES (7, 'Canon');
INSERT INTO out_of_stock_product VALUES (8, 'Nikon');
INSERT INTO out_of_stock_product VALUES (9,'Xbox');
INSERT INTO out of stock product VALUES (10, 'Playstation');
```

Run it... »

SQL> SELECT * FROM category;

CATEGORY_ID	PRODUCT_NAME
1	Nokia
2	Samsung
3	HP
4	Dell
5	Apple
6	Nikon
7	Playstation

SQL> SELECT * FROM product;

CATEGORY_ID	PRODUCT_NAME
1	Samsung
2	LG
3	нтс
4	HP
5	Dell
6	Apple
7	Canon
8	Nikon
9	Xbox
10	Playstation

```
SQL> SELECT product_name FROM product
UNION
SELECT product_name FROM out_of_stock_product;
PRODUCT_NAME
Apple
Cameras
Dell
Gaming
HP
Laptops
Mobiles
Nikon
Nokia
Playstation
Samsung
Tablet
12 rows selected.
                                 Run it... »
```

SQL UNION ALL Example

```
SQL> SELECT product_name FROM product
UNION ALL
SELECT product_name FROM out_of_stock_product;
PRODUCT_NAME
Apple
Cameras
Dell
Gaming
HP
Laptops
Mobiles
Nikon
Nokia
Playstation
Samsung
Tablet
12 rows selected.
```