

SQL SELF JOIN

SQL Self JOIN joining same table to itself. SQL Self JOIN possible only when table stored records are in hierarchical relationship between them.

You must use table alias name otherwise you can't distinguish columns name (referenced of which table's).

Logically assume that same table have two different copies but not actually different copies.



Example Table

Considering following `orders` table is our example table.

```
SQL> CREATE TABLE orders(  
    order_id number(3),  
    product_name VARCHAR(25),  
    customer_name VARCHAR(25),  
    order_amount number(5)  
);  
  
INSERT INTO orders VALUES (1, 'Nokia Mobile', 'Opal Kole', 290);  
INSERT INTO orders VALUES (2, 'Flip Cover', 'Max Miller', 15);  
INSERT INTO orders VALUES (3, 'Handsfree', 'Beccaa Moss', 7);  
INSERT INTO orders VALUES (4, 'Canon Camera', 'Paul Singh', 2200);  
INSERT INTO orders VALUES (5, 'Playstation', 'Max Miller', 70);  
INSERT INTO orders VALUES (6, 'Sandwich Maker', 'Beccaa Moss', 28);  
INSERT INTO orders VALUES (7, 'Pen Drive 16GB', 'Opal Kole', 12);  
INSERT INTO orders VALUES (8, 'Headphone', 'Reed Koch', 38);  
INSERT INTO orders VALUES (9, 'HP Laptop i5', 'Reed Koch', 1300);  
INSERT INTO orders VALUES (10, 'Titanic Bluray Disk', 'Beccaa Moss', 78);
```

```
SELECT * FROM orders;
```

ORDER_ID	PRODUCT_NAME	CUSTOMER_NAME	ORDER_AMOUNT
1	Nokia Mobile	Opal Kole	290
2	Flip Cover	Max Miller	15
3	Handsfree	Beccaa Moss	7
4	Canon Camera	Paul Singh	2200
5	Playstation	Max Miller	70
6	Sandwich Maker	Beccaa Moss	28
7	Pen Drive 16GB	Opal Kole	12
8	Headphone	Reed Koch	38
9	HP Laptop i5	Reed Koch	1300
10	Titanic Bluray Disk	Beccaa Moss	78

10 rows selected.

Run it... »

SQL SELF Join Example

```
SQL> SELECT A.order_id, A.product_name,  
          B.order_id, B.product_name, B.customer_name  
FROM orders A  
INNER JOIN orders B  
ON A.customer_name = B.customer_name  
WHERE A.order_id < B.order_id;
```

ORDER_ID	PRODUCT_NAME	CUSTOMER_NAME
2	Flip Cover	Max Miller
3	Handsfree	Beccaa Moss
1	Nokia Mobile	Opal Kole
8	Headphone	Reed Koch
6	Sandwich Maker	Beccaa Moss
3	Handsfree	Beccaa Moss

Run it... »

SQL SELF Join Example Explanation

Above example we are use **A and B table alias name**.

Inner Join to join predicate condition **(A.customer_name = B.customer_name)** **customer_name** only those whose are in same **customer_name** in Table A or Table B. It's mean cross **customer_name** are eliminate.

And last WHERE clause **A.order_id < B.order_id** means eliminate pairings where **order_id** Table A is not less than to **order_id** of Table B.