EXISTS

The EXISTS condition in SQL is used to check whether the result of a correlated nested query is empty (contains no tuples) or not. The result of EXISTS is a boolean value True or False. It can be used in a SELECT, UPDATE, INSERT or DELETE statement.

Syntax

```
SELECT column_name(s) >FROM table_name >WHERE EXISTS (>
SELECT column_name(s) >FROM table_name >WHERE condition);
```

Examples: Consider the following two relation “Customers” and “Orders”.

Customers

customer_id	lname	fname	website
401	Singh	Dolly	abc.com
402	Chauhan	Anuj	def.com
403	Kumar	Niteesh	ghi.com
404	Gupta	Shubham	jkl.com
405	Walecha	Divya	abc.com
406	Jain	Sandeep	jkl.com
407	Mehta	Rajiv	abc.com
408	Mehra	Anand	abc.com

Orders

order_id	c_id	order_date
1	407	2017-03-03
2	405	2017-03-05
3	408	2017-01-18
4	404	2017-02-05

Queries

1. Using EXISTS condition with SELECT statement

To fetch the first and last name of the customers who placed atleast one order.

```
SELECT fname, lname
FROM Customers
```

```
WHERE EXISTS (
    SELECT *
    FROM Orders
    WHERE Customers.customer_id = Orders.c_id
);
```

Output

fname	lname
Shubham	Gupta
Divya	Walecha
Rajiv	Mehta
Anand	Mehra

2. Using NOT with EXISTS

Fetch last and first name of the customers who has not placed any order.

```
SELECT lname, fname
FROM Customers
WHERE NOT EXISTS (
    SELECT *
    FROM Orders
    WHERE Customers.customer_id = Orders.c_id
);
```

Output

lname	fname
Singh	Dolly
Chauhan	Anuj
Kumar	Niteesh
Jain	Sandeep

3. Using EXISTS condition with DELETE statement

Delete the record of all the customer from Order Table whose last name is ‘Mehra’.

```
DELETE
FROM Orders
WHERE EXISTS (
    SELECT *
    FROM Customers
    WHERE Customers.customer_id = Orders.c_id
```

```
    AND Customers.lname = 'Mehra'
);
SELECT * FROM Orders;
```

Output

order_id	c_id	order_date
1	407	2017-03-03
2	405	2017-03-05
4	404	2017-02-05

4. Using EXISTS condition with UPDATE statement

Update the lname as ‘Kumari’ of customer in Customer Table whose customer_id is 401.

```
UPDATE Customers
SET lname = 'Kumari'
WHERE EXISTS (
    SELECT *
    FROM Customers
    WHERE customer_id = 401
);
SELECT * FROM Customers;
```

Output

customer_id	lname	fname	website
401	Kumari	Dolly	abc.com
402	Chauhan	Anuj	def.com
403	Kumar	Niteesh	ghi.com
404	Gupta	Shubham	jkl.com
405	Walecha	Divya	abc.com
406	Jain	Sandeep	jkl.com
407	Mehta	Rajiv	abc.com
408	Mehra	Anand	abc.com