# AIM: To create a subqueries to get the desired result Theory: **Subquery** In SQL a Subquery can be simply defined as a query within another query. In other words, a Subquery is a query that is embedded in the WHERE clause of another SQL query. Important rules for Subqueries: A subquery can be placed in several SQL clauses: WHERE clause, HAVING clause, FROM clause. Subqueries can be used with SELECT, UPDATE, INSERT, and DELETE statements, and the expression operator. It could be an equality operator or comparison operator such as =, >, =, <=, and Like operator. A subquery is a query within another query. The outer query is called the main query, and the inner query is called the subquery. The subquery generally executes first when the subquery doesn't have any co-relation with the main query, when there is a co-relation the parser takes the decision on the fly on which query to execute on precedence and uses the output of the subquery accordingly. The subquery must be enclosed in parentheses. Subqueries are on the right side of the comparison operator. • ORDER BY command cannot be used in a Subquery. THE GROUP BY command can be used to perform the same function as the ORDER BY command. Use single-row operators with single-row Subqueries. Use multiple-row operators with multiple-row Subqueries. Syntax: SELECT column name FROM table name WHERE column name expression operator ( SELECT COLUMN\_NAME FROM TABLE NAME WHERE ... ); **Queries** 1. Find all customer who played through Cash on Delivery **Syntax:** Select from Customers where CustomerID in (Select CustomerID from Orders where PaymentMethod="Cash on Delivery"); **Result:** CustomerID CustomerName PhoneNo Address Email 11249 Airoli Vansh 878398 vansh@gmail.com 19403 Pranay 879838 Borivali pranay@gmail.com 2. Find all Customer whose amount is more than 500 **Syntax:**

```
SELECT CustomerName, PhoneNo FROM Customers where CustomerID in (Select CustomerID from Orders where Amount>500);
```

#### **Result:**

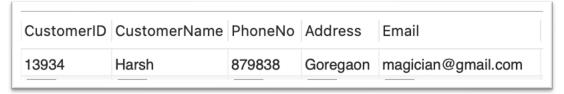
CustomerName	PhoneNo
Vansh	878398
Yash	873458
Harsh	879838
Sahil	879738
Pranay	879838
-	

3. Find the name of Customer who take out from Pizza Hut

## **Syntax:**

```
SELECT *
FROM Customers
where CustomerID in
(Select CustomerID
from Orders
where RestName="Pizza Hut");
```

### **Result:**



**4.** Find the name of delivery Person who delivered to Customer ID 21458

## **Syntax:**

```
Select DelName, EmployeeID
From DeliveryPerson
where EmployeeID in
(Select EmployeeID
from Orders
where CustomerID=21458);
```

#### **Result:**



5. Find delivery person ID whose rating is more than 3

**Syntax:** 

```
Select EmployeeID
From Orders
where EmployeeID in
(Select EmployeeID
from DeliveryPerson
where Rating>3)
group by EmployeeID;
Result:
```



**6.** Find the Delivery person who have food delivered from Bhagat Tarachand, Taj hotel **Syntax:** 

```
Select DelName,EmployeeID
From DeliveryPerson
where EmployeeID in
(Select EmployeeID
from Orders
where RestName in ("Bhagat Tarachand","Taj hotel"));
```

## **Result:**



7. Find the Restaurants present in Mumbai, Vashi

## **Syntax:**

**Result:** 

Select RestName
From Orders
Where ResturID in
(Select ResturID
From Restaurants
Where Location in ("Mumbai","Vashi"))
Group By RestName;



**8.** Find the Restaurants whose rating is greater than 4

# Syntax: Select RestName From Orders Where ResturID in (Select ResturID From Restaurants Where Rating > 4) Group By RestName; **Result:** RestName Pizza Hut McDonalds Belgian Waffles 9. Find the Restaurants who has Varieties Indian and Chinese **Syntax:** Select RestName From Orders Where ResturID in (Select ResturID From Restaurants Where Varieties in ("Indian", "Chinese")) Group By RestName; **Result:** RestName Taj hotel **Bhagat Tarachand** Kshirsagar From this experiment we concluded that we could write subqueries in SQL. Conclusion