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:
	2. Find all Customer whose amount is more than 500
	Syntax:

CustomerID	CustomerName	PhoneNo	Address	Email
11249	Vansh	878398	Airoli	vansh@gmail.com
19403	Pranay	879838	Borivali	pranay@gmail.com

```
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:

CustomerID	CustomerName	PhoneNo	Address	Email
13934	Harsh	879838	Goregaon	magician@gmail.com

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:

DelName	EmployeeID
Avishkar	20

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:

EmployeeID
25
37

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:

Name	EmployeeID
Rahul	18
Avishkar	20
NULL	NULL

7. Find the Restaurants present in Mumbai, Vashi

Syntax:

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

Result:

RestName
Taj hotel
Bhagat Tarachand
Belgian Waffles

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

Conclusion	From this experiment we concluded that we could write subqueries in SQL.