# **DBMS LAB ASSIGNMENT-5**

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Roll No.:-19BCS021.

Database: - Travel Agency

1. Illustrate logical ANY, ALL and LIKE operators

#### **ANY**

# QUERY 1:-

#### **OUTPUT:**

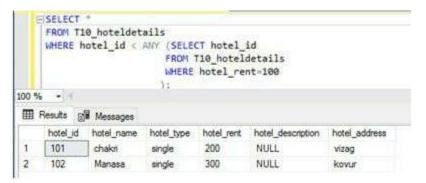
```
FROM T10_hoteldetails
WHERE hotel_id < ANV (SELECT hotel_id
FROM T10_hoteldetails
WHERE hotel_rent=100
);

100 % 

Results M Messages

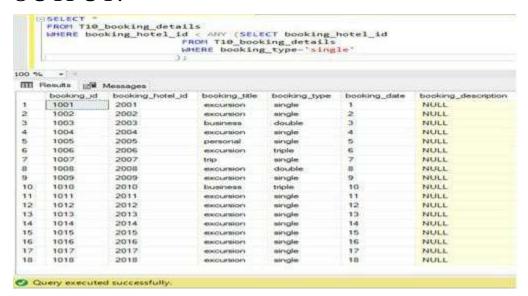
hotel_id hotel_name hotel_type hotel_rent hotel_description hotel_address
1 101 chakn single 200 NULL vizag
2 102 Manasa single 300 NULL kovur
```

# QUERY 2:-



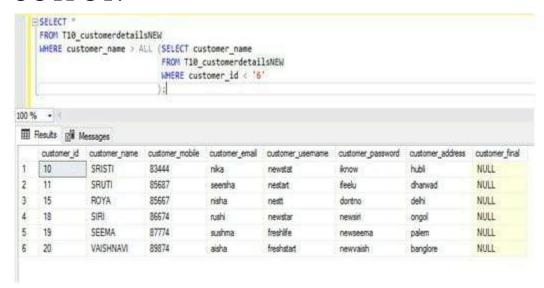
# QUERY 3:-

# **OUTPUT:**



#### ALL

# QUERY 1:-

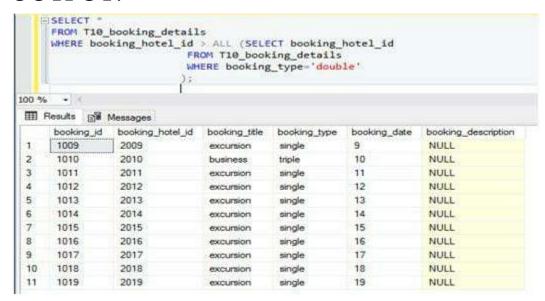


# QUERY 2:-

#### **OUTPUT:**

```
ESELECT "
     FROM T10 hoteldetails
     WHERE hotel_id > ALL (SELECT hotel_id
                             FROM T10_hoteldetails
                             WHERE hotel_rent=200
100 % +
 Ⅲ Results
           Messages
              hotel_name
      hotel_id
                         hotel_type
                                    hotel_rent
                                              hotel_description
                                                             hotel_address
      105
              mehraj
                                    250
                                              NULL
                          single
                                                             kadapa
```

# QUERY 3:-



#### LIKE

# QUERY 1:-

**SELECT \*** 

FROM T10\_customerdetailsNEW
WHERE customer\_name LIKE 'C%';

#### **OUTPUT:**



# QUERY 2:-

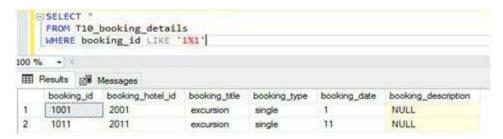
```
SELECT *
FROM T10_hoteldetails
WHERE hotel_rent=200 AND hotel_type LIKE '__n%';
```



# QUERY 3:

```
SELECT *
FROM T10_booking_details
WHERE booking_id LIKE '1%1'
```

#### **OUTPUT:**



2. One query for each Aggregate function.

# AVG() QUERY:-

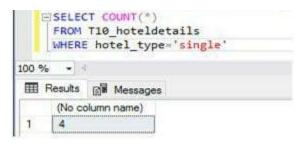
SELECT AVG(hotel\_rent)
FROM T10\_hoteldetails



# COUNT() QUERY:-

```
SELECT COUNT(*)
FROM T10_hoteldetails
WHERE hotel_type='single'
```

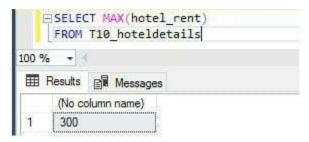
#### **OUTPUT:**



# MAX() QUERY:-

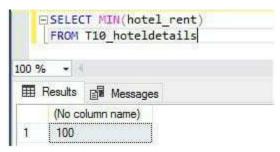
SELECT MAX(hotel\_rent)
FROM T10\_hoteldetails

#### **OUTPUT:**



# MIN() QUERY:-

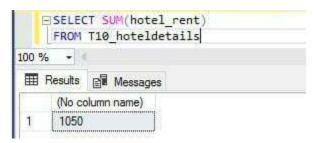
SELECT MIN(hotel\_rent)
FROM T10\_hoteldetails



# SUM() QUERY:-

```
SELECT SUM(hotel_rent)
FROM T10_hoteldetails
```

#### **OUTPUT:-**

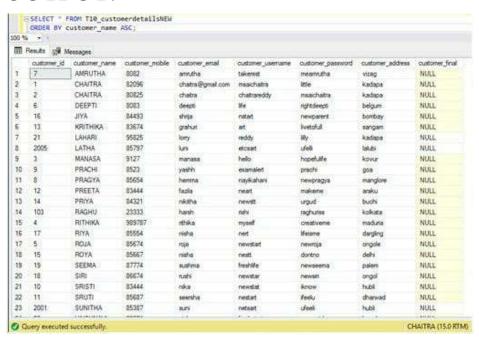


3. Illustrate the usage of order by, group by and having clause (2 queries for each case)

#### **ORDER BY**

# QUERY 1:-

```
SELECT * FROM T10_customerdetailsNEW
ORDER BY customer_name ASC;
```



# QUERY 2:-

```
SELECT * FROM T10_hoteldetails
ORDER BY hotel_id DESC;
```

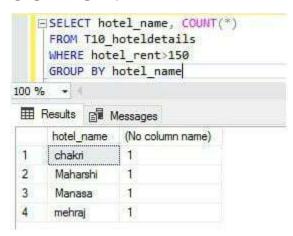
#### **OUTPUT:**



# GROUP BY

# QUERY 1:

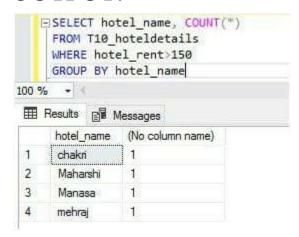
```
SELECT hotel_name, COUNT(*)
FROM T10_hoteldetails
WHERE hotel_rent>150
GROUP BY hotel_name
```



# QUERY 2:-

SELECT customer\_name, COUNT(\*)
FROM T10\_customerdetailsNEW
GROUP BY customer\_name

#### **OUTPUT:**

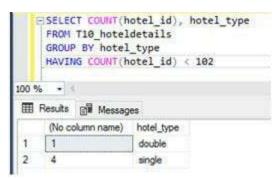


# HAVING CLAUSE

# QUERY 1:-

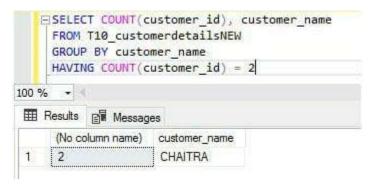
SELECT COUNT(hotel\_id), hotel\_type
FROM T10\_hoteldetails
GROUP BY hotel\_type
HAVING COUNT(hotel\_id) < 102</pre>

#### **OUTPUT:**



# QUERY 2:-

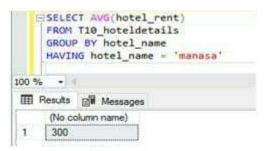
```
SELECT COUNT(customer_id), customer_name
FROM T10_customerdetailsNEW
GROUP BY customer_name
HAVING COUNT(customer_id) = 2
```



4. Use Aggregate function with group by and having AVG() QUERY:-

```
SELECT AVG(hotel_rent)
FROM T10_hoteldetails
GROUP BY hotel_name
HAVING hotel_name = 'manasa'
```

#### **OUTPUT:-**



# COUNT() QUERY:-

```
SELECT COUNT(hotel_id)
FROM T10_hoteldetails
GROUP BY hotel_rent
HAVING hotel_rent = 200
```



# MAX() QUERY:-

```
SELECT MAX(hotel_rent)
FROM T10_hoteldetails
GROUP BY hotel_name
HAVING hotel_name = 'chakri'
```

#### **OUTPUT:**

```
FROM T10_hoteldetails
GROUP BY hotel_name
HAVING hotel_name = 'chakri'

100 % 
Results Messages

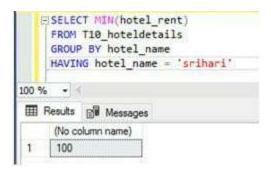
(No column name)

1 200
```

# MIN() QUERY:-

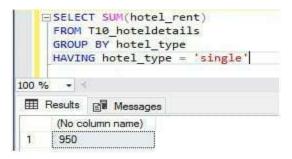
```
SELECT MIN(hotel_rent)
FROM T10_hoteldetails
GROUP BY hotel_name
HAVING hotel name = 'srihari'
```

#### **OUTPUT:**



# SUM() QUERY:-

```
SELECT SUM(hotel_rent)
FROM T10_hoteldetails
GROUP BY hotel_type
HAVING hotel_type = 'single'
```



5. Write at least 3 nested queries using order by, group by and having clause.

# **QUERY:-**

```
SELECT booking_title
FROM T10_bookingdetails
WHERE booking_id = ANY(
    SELECT booking_id
    FROM T10_hoteldetails
    WHERE hotel_id= ANY(
        SELECT hotel_id
        FROM T10_packagedetails
        WHERE package_type= 'DUAL'
    )
)
GROUP BY booking_title
HAVING booking_title LIKE '%a%'
ORDER BY booking_title DESC
```

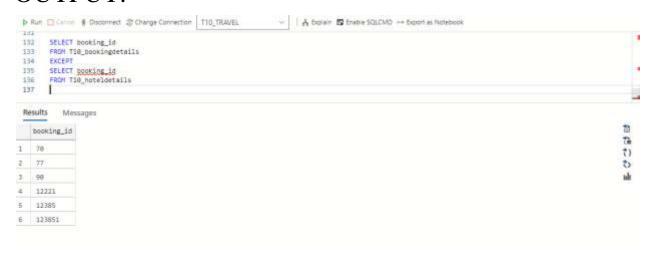


# 6. Illustrate the Usage of Except, Exists, Not Exists, Union, Intersection

# **EXCEPT QUERY:-**

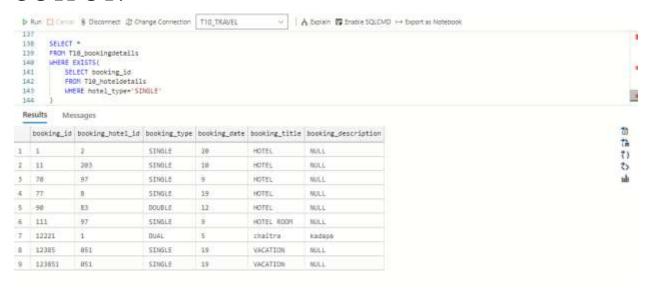
```
SELECT booking_id
FROM T10_bookingdetails
EXCEPT
SELECT booking_id
FROM T10_hoteldetails
```

#### **OUTPUT:-**



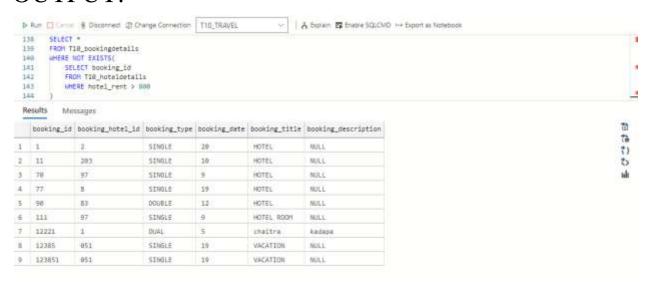
# **EXISTS QUERY:-**

```
SELECT *
FROM T10_bookingdetails
WHERE EXISTS(
     SELECT booking_id
    FROM T10_hoteldetails
    WHERE hotel_type='SINGLE'
)
```



# **NOT EXISTS QUERY:-**

```
SELECT *
FROM T10_bookingdetails
WHERE NOT EXISTS(
    SELECT booking_id
    FROM T10_hoteldetails
    WHERE hotel_rent > 800
)
```



# **UNION QUERY:-**

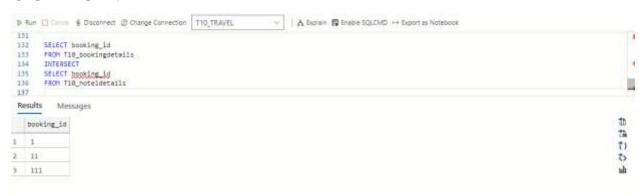
SELECT booking\_id FROM T10\_bookingdetails UNION SELECT booking\_id FROM T10\_hoteldetails

# **OUTPUT:**



# **INTERSECTION QUERY:-**

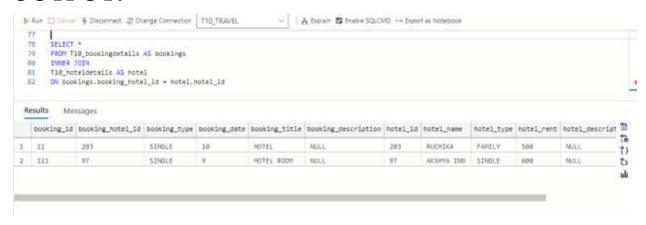
SELECT booking\_id FROM T10\_bookingdetails INTERSECT SELECT booking\_id FROM T10\_hoteldetails



# 7. INNER JOIN, LEFT OUTER JOIN, RIGHT OUTER JOIN- 3 queries for each instance INNER JOIN QUERY 1:-

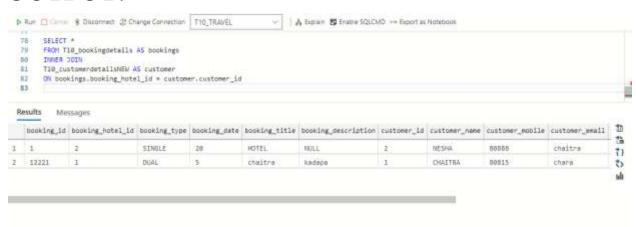
```
SELECT *
FROM T10_bookingdetails AS bookings
INNER JOIN
T10_hoteldetails AS hotel
ON bookings.booking_hotel_id = hotel.hotel_id
```

#### **OUTPUT:-**



# QUERY 2:-

# SELECT \* FROM T10\_bookingdetails AS bookings INNER JOIN T10\_customerdetailsNEW AS customer ON bookings.booking\_hotel\_id = customer.customer\_id



# QUERY 3:-

**SELECT \*** 

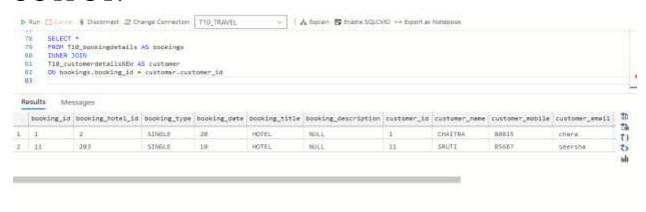
FROM T10\_bookingdetails AS bookings

INNER JOIN

T10\_customerdetailsNEW AS customer

ON bookings.booking\_id = customer.customer\_id

#### **OUTPUT:-**



# LEFT OUTER JOIN QUERY 1:-

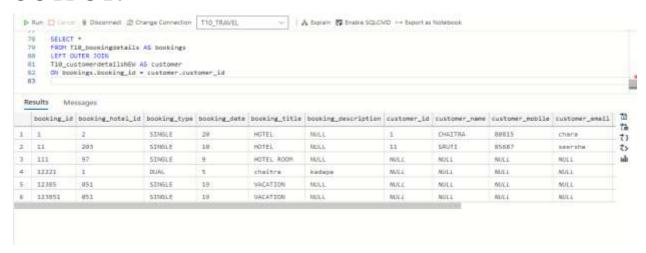
**SELECT \*** 

FROM T10\_bookingdetails AS bookings

LEFT OUTER JOIN

T10\_customerdetailsNEW AS customer

ON bookings.booking\_id = customer.customer\_id



# QUERY 2:-

**SELECT \*** 

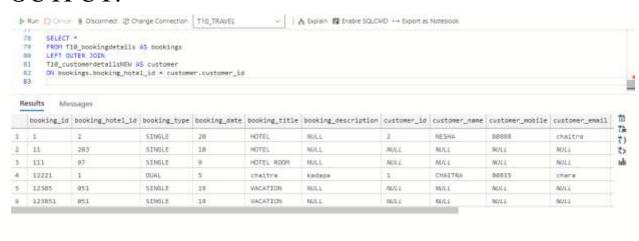
FROM T10\_bookingdetails AS bookings

LEFT OUTER JOIN

T10\_customerdetailsNEW AS customer

ON bookings.booking\_hotel\_id = customer.customer\_id

#### **OUTPUT:-**



# QUERY 3:-

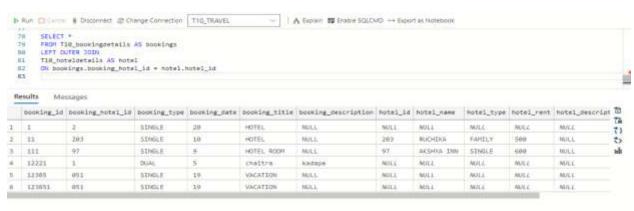
SELECT \*

FROM T10\_bookingdetails AS bookings

LEFT OUTER JOIN

T10\_hoteldetails AS hotel

ON bookings.booking\_hotel\_id = hotel.hotel\_id



# **RIGHT OUTER JOIN QUERY 1:-**

#### **SELECT \***

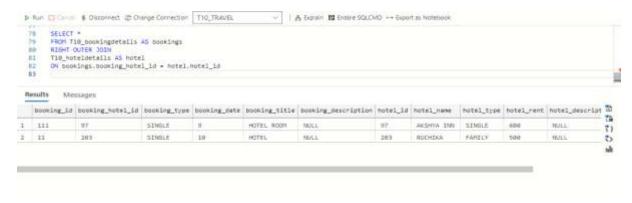
FROM T10\_bookingdetails AS bookings

RIGHT OUTER JOIN

T10\_hoteldetails AS hotel

ON bookings.booking\_hotel\_id = hotel.hotel\_id

#### **OUTPUT:-**



# QUERY 2:-

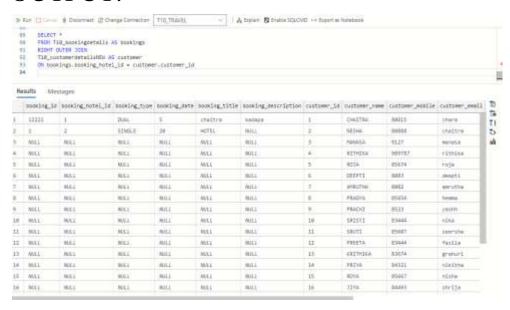
#### **SELECT \***

FROM T10\_bookingdetails AS bookings

#### RIGHT OUTER JOIN

T10 customerdetailsNEW AS customer

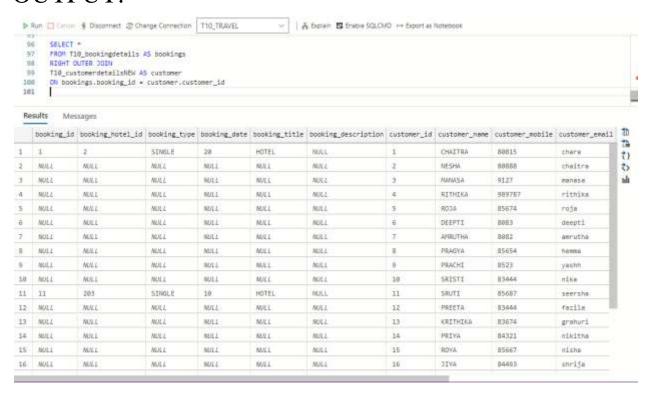
ON bookings.booking\_hotel\_id = customer.customer\_id



# QUERY 3:-

```
SELECT *
FROM T10_bookingdetails AS bookings
RIGHT OUTER JOIN
T10_customerdetailsNEW AS customer
ON bookings.booking_id = customer.customer_id
```

#### **OUTPUT:**



#### 8. Use all the above condition in JOIN as well.

#### **QUERY:-**

```
SELECT customer_name, MIN(customer_id) AS customer_id, AVG(customer_mobile) AS custom
er_mobile
FROM T10_customerdetailsNEW AS customers
JOIN
T10_bookingdetails AS bookings
ON customers.customer_id = bookings.booking_hotel_id
GROUP BY customer_name
HAVING customer_name LIKE '%e%'
ORDER BY customer_name DESC
```

