

KARTHIK SAJJAN

19bcs049

Question 1: Illustrate logical ANY, ALL and LIKE operator- the queries should be relevant to your respective databases 3 queries for each operator. One query explaining the difference between ANY and ALL.

Solution:

3 Queries for ANY

```
SELECT phone_number FROM T3_EmployeeDetails WHERE designation =  
ANY (SELECT designation FROM T3_EmployeeDetails WHERE salary = 12500);
```

```
SELECT payment_amount FROM T3_BookingDetails WHERE customer_id =  
ANY (SELECT customer_id FROM T3_CustomerDetails WHERE age<30);
```

```
SELECT * FROM T3_CustomerDetails WHERE age <  
ANY (SELECT age FROM T3_CustomerDetails WHERE gender = 'M');
```

Database Output:

| phone_number |
|--------------|
| 911234567890 |
| 911234567891 |
| 911234567892 |
| 911234567893 |

| payment_amount |
|----------------|
| 25000.00 |
| 25000.00 |
| 25000.00 |
| 25000.00 |
| 50000.00 |
| 50000.00 |
| 50000.00 |
| 50000.00 |

| customer_id | first_name | last_name | age | gender | phone |
|-------------|------------|-----------|-----|--------|--------------|
| 0000000001 | Kiran | Kumar | 31 | M | 919999999999 |
| 0000000002 | Charan | Rao | 28 | M | 919999999998 |
| 0000000003 | Farhan | Abdul | 37 | M | 919999999997 |
| 0000000004 | Kissan | Chary | 21 | M | 919999999996 |
| 0000000005 | Laban | Seth | 18 | M | 919999999995 |
| 0000000006 | Cheman | Kumar | 35 | M | 919999999994 |
| 0000000007 | Eeshwar | Prasad | 53 | M | 919999999993 |
| 0000000008 | Raghave... | Swamy | 42 | M | 919999999992 |

3 Queries for ALL

```
SELECT phone_number FROM T3_EmployeeDetails WHERE designation =  
ALL (SELECT designation FROM T3_EmployeeDetails WHERE salary = 12500);
```

```
SELECT CONCAT(first_name, last_name) AS name FROM T3_CustomerDetails WHERE age <  
ALL (SELECT age FROM T3_CustomerDetails WHERE age>30);
```

```
SELECT * FROM T3_CustomerDetails WHERE age <  
ALL (SELECT age FROM T3_CustomerDetails WHERE gender = 'M');
```

Database Output:

| phone_number | |
|--------------|--------------|
| 1 | 911234567890 |
| 2 | 911234567891 |
| 3 | 911234567892 |
| 4 | 911234567893 |

| name | |
|------|---------------------|
| 1 | CharanRao |
| 2 | KissanChary |
| 3 | LabanSeth |
| 4 | ChakramKumar |
| 5 | JaiKrishna |
| 6 | DeepakChowdary |
| 7 | KarthikSajian |
| 8 | ManaswiniKsheeraja |
| 9 | ShreyaKuppa |
| 10 | SrinidhiKuppa |
| 11 | KrishnaPaanchajanya |

| customer_id | first_name | last_name | age | gender | phone | |
|-------------|------------|-----------|-------|--------|-------|--------------|
| 1 | 0000000019 | Shreya | Kuppa | 8 | F | 919999999187 |
| 2 | 0000000020 | Srinidhi | Kuppa | 5 | F | 919999999964 |

3 Queries for LIKE

```
SELECT name, designation FROM T3_EmployeeDetails WHERE employee_id LIKE '02%';
SELECT CONCAT(first_name, last_name) AS name FROM T3_CustomerDetails WHERE first_name LIKE 'C%';
SELECT DISTINCT package_name FROM T3_PackageDetails WHERE booking_id LIKE '01%';
```

Database Output:

| name | | designation |
|------|-------------|-----------------|
| 1 | B. SURESH | Driver |
| 2 | N. NARESH | Driver |
| 3 | T. MALLESH | Cleaner |
| 4 | P. PARAMESH | Luggage Manager |

| name | |
|------|--------------|
| 1 | CharanRao |
| 2 | ChemanKumar |
| 3 | ChakramKumar |

| package_name | |
|--------------|-------------|
| 1 | Kulu Manali |

Query to distinguish between ANY and ALL:

```
SELECT CONCAT(first_name, last_name) AS name FROM T3_CustomerDetails WHERE first_name = ANY(SELECT first_name FROM T3_CustomerDetails WHERE first_name LIKE 'C%');

SELECT CONCAT(first_name, last_name) AS name FROM T3_CustomerDetails WHERE first_name = ALL(SELECT first_name FROM T3_CustomerDetails WHERE first_name LIKE 'C%');
```

Database Output:

| name | |
|------|--------------|
| 1 | CharanRao |
| 2 | ChemanKumar |
| 3 | ChakramKumar |

| name | |
|------|--|
|------|--|

Question 2: One query for each Aggregate function

Solution:

Queries:

```
SELECT AVG(salary) FROM T3_EmployeeDetails WHERE designation = 'Driver';

SELECT COUNT(*) FROM T3_PackageDetails WHERE cost>25000;

SELECT MAX(age) FROM T3_CustomerDetails;

SELECT MIN(age) FROM T3_CustomerDetails;

SELECT SUM(payment_amount) FROM T3_BookingDetails;
```

Database Output:

| |
|------------------|
| (No column name) |
| 1 12500.000000 |
| (No column name) |
| 1 10 |
| (No column name) |
| 1 61 |
| (No column name) |
| 1 5 |
| (No column name) |
| 1 750000.00 |

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

Solution:

2 Queries for ORDER BY:

```
SELECT * FROM T3_CustomerDetails ORDER BY first_name ASC;

SELECT * FROM T3_EmployeeDetails ORDER BY employee_id DESC;
```

Database Output:

| customer_id | first_name | last_name | age | gender | phone |
|--------------|------------|-----------|-----|--------|--------------|
| 1 0000000010 | Chakram | Kumar | 14 | M | 919999999990 |
| 2 0000000002 | Charan | Rao | 28 | M | 919999999998 |
| 3 0000000006 | Cheman | Kumar | 35 | M | 919999999994 |
| 4 0000000014 | Deepak | Chowdary | 19 | M | 919999999915 |
| 5 0000000007 | Eeshwar | Prasad | 53 | M | 919999999993 |
| 6 0000000003 | Farhan | Abdul | 37 | M | 919999999997 |
| 7 0000000011 | Jai | Krishna | 28 | M | 919999999912 |
| 8 0000000015 | Karthik | Sajan | 20 | M | 919999999189 |

| employee_id | name | designation | phone_number | salary |
|-------------|-------------|-----------------|--------------|----------|
| 1 02008 | P. PARAMESH | Luggage Manager | 911234567898 | 5000.00 |
| 2 02006 | T. MALLESH | Cleaner | 911234567895 | 8000.00 |
| 3 02004 | N. NARESH | Driver | 911234567893 | 12500.00 |
| 4 02003 | B. SURESH | Driver | 911234567892 | 12500.00 |
| 5 01007 | O. JAYESH | Luggage Manager | 911234567897 | 5000.00 |
| 6 01005 | R. PARESH | Cleaner | 911234567894 | 8000.00 |
| 7 01002 | A. RAMESH | Driver | 911234567891 | 12500.00 |
| 8 01001 | P. RAJESH | Driver | 911234567890 | 12500.00 |

2 Queries for GROUP BY:

```
SELECT gender, COUNT(*) FROM T3_CustomerDetails WHERE age>21 GROUP BY gender;

SELECT bus_type, COUNT(*) FROM T3_Bus GROUP BY bus_type;
```

Database Output:

| | gender | (No column name) |
|---|--------|------------------|
| 1 | F | 1 |
| 2 | M | 12 |

| | bus_type | (No column name) |
|---|----------|------------------|
| 1 | 2 Seater | 10 |
| 2 | Sleeper | 10 |

2 Queries for HAVING:

```
SELECT COUNT(employee_id), designation FROM T3_EmployeeDetails GROUP BY designation HAVING COUNT(employee_id) > 1;
```

```
SELECT COUNT(customer_id), last_name FROM T3_CustomerDetails GROUP BY last_name HAVING COUNT(customer_id) > 1;
```

Database Output:

| | (No column name) | designation |
|---|------------------|-----------------|
| 1 | 2 | Cleaner |
| 2 | 4 | Driver |
| 3 | 2 | Luggage Manager |

| | (No column name) | last_name |
|---|------------------|-----------|
| 1 | 3 | Kumar |
| 2 | 2 | Kuppa |
| 3 | 2 | Ram |

Question 4: Use Aggregate function with group by and having.

Solution:

Queries:

```
SELECT AVG(age) FROM T3_CustomerDetails GROUP BY last_name HAVING last_name = 'Ram';
```

```
SELECT COUNT(booking_id) FROM T3_PackageDetails GROUP BY cost HAVING cost = 50000;
```

```
SELECT MAX(payment_amount) FROM T3_BookingDetails GROUP BY payment_dateTime HAVING payment_dateTime = '2021-02-19 09:37:00.000';
```

```
SELECT MIN(age) FROM T3_CustomerDetails GROUP BY last_name HAVING last_name = 'kuppa';
```

```
SELECT SUM(salary) FROM T3_EmployeeDetails GROUP BY designation HAVING designation = 'Driver';
```

Database Output:

| | (No column name) |
|---|------------------|
| 1 | 54 |

| | (No column name) |
|---|------------------|
| 1 | 10 |

| | (No column name) |
|---|------------------|
| 1 | 25000.00 |

| | (No column name) |
|---|------------------|
| 1 | 5 |

| | (No column name) |
|---|------------------|
| 1 | 50000.00 |

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

Solution:

Queries:

```
SELECT designation, AVG(salary) AS AverageSalary FROM T3_EmployeeDetails WHERE designation = 'Luggage Manager'
GROUP BY designation HAVING AVG(salary) < (SELECT AVG(salary) FROM T3_EmployeeDetails WHERE designation = 'Cleaner');
```

```
SELECT last_name, SUM(age) FROM T3_CustomerDetails WHERE customer_id =
ANY(SELECT customer_id FROM T3_BookingDetails WHERE payment_amount = 25000) GROUP BY last_name HAVING last_name LIKE '%a%';
```

```
SELECT last_name, SUM(age) FROM T3_CustomerDetails WHERE customer_id =
ANY(SELECT customer_id FROM T3_BookingDetails WHERE payment_amount = 50000) GROUP BY last_name HAVING last_name LIKE '%a%';
```

Database Output:

| designation | AverageSalary |
|-----------------|---------------|
| Luggage Manager | 5000.000000 |

| last_name | (No column name) |
|------------|------------------|
| Abdul | 37 |
| Chary | 21 |
| Chatrapati | 61 |
| Kumar | 80 |
| Prasad | 53 |
| Rao | 28 |
| Swamy | 42 |

| last_name | (No column name) |
|-----------|------------------|
| Chowdary | 19 |
| Krishna | 28 |
| Kaheeraja | 16 |
| Kuppa | 13 |
| lingaraju | 41 |
| Ram | 108 |
| Sajian | 20 |
| Thakur | 33 |

Question 6: Illustrate the Usage of Except, Exists, Not Exists, Union, Intersection

Solution:

Query:

```
SELECT customer_id FROM T3_CustomerDetails EXCEPT SELECT customer_id FROM T3_BookingDetails;
```

```
SELECT * FROM T3_CustomerDetails WHERE EXISTS(SELECT customer_id FROM T3_BookingDetails WHERE payment_amount = 25000);
```

```
SELECT * FROM T3_BookingDetails WHERE NOT EXISTS (SELECT customer_id FROM T3_CustomerDetails WHERE age>180);
```

```
SELECT customer_id FROM T3_BookingDetails UNION SELECT customer_id FROM T3_CustomerDetails;
```

```
SELECT booking_id FROM T3_PackageDetails INTERSECT SELECT booking_id FROM T3_DestinationDetails;
```

Database Output:

| customer_id |
|-------------|
| 0000000021 |
| 0000000024 |

| customer_id | first_name | last_name | age | gender | phone |
|-------------|------------|-----------|-----|--------|--------------|
| 0000000001 | Kiran | Kumar | 31 | M | 919999999999 |
| 0000000002 | Charan | Rao | 28 | M | 919999999998 |
| 0000000003 | Farhan | Abdul | 37 | M | 919999999997 |
| 0000000004 | Kissan | Chary | 21 | M | 919999999996 |

| customer_id | booking_id | payment_amount | payment_dateTime | refunded | refund_amount | refund_dateTime |
|-------------|------------|----------------|-------------------------|----------|---------------|-----------------|
| 0000000001 | 0100001 | 25000.00 | 2021-02-19 09:37:00.000 | NULL | NULL | NULL |
| 0000000002 | 0100002 | 25000.00 | 2021-02-19 09:42:00.000 | NULL | NULL | NULL |
| 0000000003 | 0100003 | 25000.00 | 2021-02-19 09:16:00.000 | NULL | NULL | NULL |
| 0000000004 | 0100004 | 25000.00 | 2021-02-19 09:07:00.000 | NULL | NULL | NULL |

| customer_id |
|-------------|
| 0000000001 |
| 0000000002 |
| 0000000003 |
| 0000000004 |

| booking_id |
|------------|
| 0100001 |
| 0100002 |
| 0100003 |
| 0100004 |
| 0100005 |
| 0100006 |
| 0100007 |
| 0100008 |

| | booking_id | city | hotel_name | hotel_description | address | booking_id | package_name | package_description | cost | starting_point | |
|----|------------|-------------|------------|-------------------|-------------|------------|--------------|---------------------|----------|----------------|--|
| 1 | 0100001 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100001 | Kulu Manali | Chill Out | 25000.00 | Hyderabad | |
| 2 | 0100002 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100002 | Kulu Manali | Chill Out | 25000.00 | Hyderabad | |
| 3 | 0100003 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100003 | Kulu Manali | Chill Out | 25000.00 | Hyderabad | |
| 4 | 0100004 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100004 | Kulu Manali | Chill Out | 25000.00 | Hyderabad | |
| 5 | 0100005 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100005 | Kulu Manali | Chill Out | 25000.00 | Hyderabad | |
| 6 | 0100006 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100006 | Kulu Manali | Chill Out | 25000.00 | Hyderabad | |
| 7 | 0100007 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100007 | Kulu Manali | Chill Out | 25000.00 | Hyderabad | |
| 8 | 0100008 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100008 | Kulu Manali | Chill Out | 25000.00 | Hyderabad | |
| 9 | 0100009 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100009 | Kulu Manali | Chill Out | 25000.00 | Hyderabad | |
| 10 | 0100010 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100010 | Kulu Manali | Chill Out | 25000.00 | Hyderabad | |

| | customer_id | booking_id | payment_amount | payment_dateTime | refunded | refund_amount | refund_dateTime | booking_id | city | hotel_name | hotel_description | address |
|----|-------------|------------|----------------|-------------------------|----------|---------------|-----------------|------------|-------------|------------|-------------------|-------------|
| 1 | 0000000001 | 0100001 | 25000.00 | 2021-02-19 09:37:00.000 | NULL | NULL | NULL | 0100001 | Kulu Manali | Raj Palace | Good | Kulu Manali |
| 2 | 0000000002 | 0100002 | 25000.00 | 2021-02-19 09:42:00.000 | NULL | NULL | NULL | 0100002 | Kulu Manali | Raj Palace | Good | Kulu Manali |
| 3 | 0000000003 | 0100003 | 25000.00 | 2021-02-19 09:16:00.000 | NULL | NULL | NULL | 0100003 | Kulu Manali | Raj Palace | Good | Kulu Manali |
| 4 | 0000000004 | 0100004 | 25000.00 | 2021-02-19 09:07:00.000 | NULL | NULL | NULL | 0100004 | Kulu Manali | Raj Palace | Good | Kulu Manali |
| 5 | 0000000005 | 0100005 | 25000.00 | 2021-02-19 09:34:00.000 | NULL | NULL | NULL | 0100005 | Kulu Manali | Raj Palace | Good | Kulu Manali |
| 6 | 0000000006 | 0100006 | 25000.00 | 2021-02-19 09:12:00.000 | NULL | NULL | NULL | 0100006 | Kulu Manali | Raj Palace | Good | Kulu Manali |
| 7 | 0000000007 | 0100007 | 25000.00 | 2021-02-19 09:18:00.000 | NULL | NULL | NULL | 0100007 | Kulu Manali | Raj Palace | Good | Kulu Manali |
| 8 | 0000000008 | 0100008 | 25000.00 | 2021-02-19 09:58:00.000 | NULL | NULL | NULL | 0100008 | Kulu Manali | Raj Palace | Good | Kulu Manali |
| 9 | 0000000009 | 0100009 | 25000.00 | 2021-02-19 09:54:00.000 | NULL | NULL | NULL | 0100009 | Kulu Manali | Raj Palace | Good | Kulu Manali |
| 10 | 0000000010 | 0100010 | 25000.00 | 2021-02-19 11:12:00.000 | NULL | NULL | NULL | 0100010 | Kulu Manali | Raj Palace | Good | Kulu Manali |

| | customer_id | booking_id | payment_amount | payment_dateTime | refunded | refund_amount | refund_dateTime | booking_id | bus_id | bus_type | dateAndTime_of_Arrival | dateAndTime_of_Depture |
|----|-------------|------------|----------------|-------------------------|----------|---------------|-----------------|------------|--------|----------|-------------------------|-------------------------|
| 1 | 0000000001 | 0100001 | 25000.00 | 2021-02-19 09:37:00.000 | NULL | NULL | NULL | 0100001 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |
| 2 | 0000000002 | 0100002 | 25000.00 | 2021-02-19 09:42:00.000 | NULL | NULL | NULL | 0100002 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |
| 3 | 0000000003 | 0100003 | 25000.00 | 2021-02-19 09:16:00.000 | NULL | NULL | NULL | 0100003 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |
| 4 | 0000000004 | 0100004 | 25000.00 | 2021-02-19 09:07:00.000 | NULL | NULL | NULL | 0100004 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |
| 5 | 0000000005 | 0100005 | 25000.00 | 2021-02-19 09:34:00.000 | NULL | NULL | NULL | 0100005 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |
| 6 | 0000000006 | 0100006 | 25000.00 | 2021-02-19 09:12:00.000 | NULL | NULL | NULL | 0100006 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |
| 7 | 0000000007 | 0100007 | 25000.00 | 2021-02-19 09:18:00.000 | NULL | NULL | NULL | 0100007 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |
| 8 | 0000000008 | 0100008 | 25000.00 | 2021-02-19 09:58:00.000 | NULL | NULL | NULL | 0100008 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |
| 9 | 0000000009 | 0100009 | 25000.00 | 2021-02-19 09:54:00.000 | NULL | NULL | NULL | 0100009 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |
| 10 | 0000000010 | 0100010 | 25000.00 | 2021-02-19 11:12:00.000 | NULL | NULL | NULL | 0100010 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |

3 Queries for RIGHT OUTER JOIN:

```
SELECT * FROM T3_DestinationDetails AS DEST RIGHT OUTER JOIN T3_PackageDetails AS PACK ON DEST.booking_id = PACK.booking_id;
SELECT * FROM T3_BookingDetails AS BOOKING RIGHT OUTER JOIN T3_DestinationDetails AS DEST ON BOOKING.booking_id = DEST.booking_id;
SELECT * FROM T3_BookingDetails AS BOOKING RIGHT OUTER JOIN T3_Bus AS BUS ON BOOKING.booking_id = BUS.booking_id;
```

Database Output:

| | booking_id | city | hotel_name | hotel_description | address | booking_id | package_name | package_description | cost | starting_point |
|----|------------|-------------|------------|-------------------|-------------|------------|--------------|---------------------|----------|----------------|
| 1 | 0100001 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100001 | Kulu Manali | Chill Out! | 25000.00 | Hyderabad |
| 2 | 0100002 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100002 | Kulu Manali | Chill Out! | 25000.00 | Hyderabad |
| 3 | 0100003 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100003 | Kulu Manali | Chill Out! | 25000.00 | Hyderabad |
| 4 | 0100004 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100004 | Kulu Manali | Chill Out! | 25000.00 | Hyderabad |
| 5 | 0100005 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100005 | Kulu Manali | Chill Out! | 25000.00 | Hyderabad |
| 6 | 0100006 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100006 | Kulu Manali | Chill Out! | 25000.00 | Hyderabad |
| 7 | 0100007 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100007 | Kulu Manali | Chill Out! | 25000.00 | Hyderabad |
| 8 | 0100008 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100008 | Kulu Manali | Chill Out! | 25000.00 | Hyderabad |
| 9 | 0100009 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100009 | Kulu Manali | Chill Out! | 25000.00 | Hyderabad |
| 10 | 0100010 | Kulu Manali | Raj Palace | Good | Kulu Manali | 0100010 | Kulu Manali | Chill Out! | 25000.00 | Hyderabad |

| | customer_id | booking_id | payment_amount | payment_dateTime | refunded | refund_amount | refund_dateTime | booking_id | city | hotel_name | hotel_description | address |
|----|-------------|------------|----------------|-------------------------|----------|---------------|-----------------|------------|-------------|------------|-------------------|-------------|
| 1 | 0000000001 | 0100001 | 25000.00 | 2021-02-19 09:37:00.000 | NULL | NULL | NULL | 0100001 | Kulu Manali | Raj Palace | Good | Kulu Manali |
| 2 | 0000000002 | 0100002 | 25000.00 | 2021-02-19 09:42:00.000 | NULL | NULL | NULL | 0100002 | Kulu Manali | Raj Palace | Good | Kulu Manali |
| 3 | 0000000003 | 0100003 | 25000.00 | 2021-02-19 09:16:00.000 | NULL | NULL | NULL | 0100003 | Kulu Manali | Raj Palace | Good | Kulu Manali |
| 4 | 0000000004 | 0100004 | 25000.00 | 2021-02-19 09:07:00.000 | NULL | NULL | NULL | 0100004 | Kulu Manali | Raj Palace | Good | Kulu Manali |
| 5 | 0000000005 | 0100005 | 25000.00 | 2021-02-19 09:34:00.000 | NULL | NULL | NULL | 0100005 | Kulu Manali | Raj Palace | Good | Kulu Manali |
| 6 | 0000000006 | 0100006 | 25000.00 | 2021-02-19 09:12:00.000 | NULL | NULL | NULL | 0100006 | Kulu Manali | Raj Palace | Good | Kulu Manali |
| 7 | 0000000007 | 0100007 | 25000.00 | 2021-02-19 09:18:00.000 | NULL | NULL | NULL | 0100007 | Kulu Manali | Raj Palace | Good | Kulu Manali |
| 8 | 0000000008 | 0100008 | 25000.00 | 2021-02-19 09:58:00.000 | NULL | NULL | NULL | 0100008 | Kulu Manali | Raj Palace | Good | Kulu Manali |
| 9 | 0000000009 | 0100009 | 25000.00 | 2021-02-19 09:54:00.000 | NULL | NULL | NULL | 0100009 | Kulu Manali | Raj Palace | Good | Kulu Manali |
| 10 | 0000000010 | 0100010 | 25000.00 | 2021-02-19 11:12:00.000 | NULL | NULL | NULL | 0100010 | Kulu Manali | Raj Palace | Good | Kulu Manali |

| | customer_id | booking_id | payment_amount | payment_dateTime | refunded | refund_amount | refund_dateTime | booking_id | bus_id | bus_type | dateAndTime_of_Arrival | dateAndTime_of_Departure |
|----|-------------|------------|----------------|-------------------------|----------|---------------|-----------------|------------|--------|----------|-------------------------|--------------------------|
| 1 | 0000000001 | 0100001 | 25000.00 | 2021-02-19 09:37:00.000 | NULL | NULL | NULL | 0100001 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |
| 2 | 0000000002 | 0100002 | 25000.00 | 2021-02-19 09:42:00.000 | NULL | NULL | NULL | 0100002 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |
| 3 | 0000000003 | 0100003 | 25000.00 | 2021-02-19 09:16:00.000 | NULL | NULL | NULL | 0100003 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |
| 4 | 0000000004 | 0100004 | 25000.00 | 2021-02-19 09:07:00.000 | NULL | NULL | NULL | 0100004 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |
| 5 | 0000000005 | 0100005 | 25000.00 | 2021-02-19 09:34:00.000 | NULL | NULL | NULL | 0100005 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |
| 6 | 0000000006 | 0100006 | 25000.00 | 2021-02-19 09:12:00.000 | NULL | NULL | NULL | 0100006 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |
| 7 | 0000000007 | 0100007 | 25000.00 | 2021-02-19 09:18:00.000 | NULL | NULL | NULL | 0100007 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |
| 8 | 0000000008 | 0100008 | 25000.00 | 2021-02-19 09:58:00.000 | NULL | NULL | NULL | 0100008 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |
| 9 | 0000000009 | 0100009 | 25000.00 | 2021-02-19 09:54:00.000 | NULL | NULL | NULL | 0100009 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |
| 10 | 0000000010 | 0100010 | 25000.00 | 2021-02-19 11:12:00.000 | NULL | NULL | NULL | 0100010 | 8714 | Sleeper | 2021-03-04 15:15:00.000 | 2021-03-06 15:15:00.000 |

Question 8: Use all the above condition in JOIN as well.

Solution:

Query:

```
SELECT first_name, MIN(booking_id) AS booking_id, AVG(age) AS age, MAX(phone) AS contact_no
FROM T3_CustomerDetails AS Customer
JOIN
T3_BookingDetails AS Booking ON Customer.customer_id = Booking.customer_id
GROUP BY first_name HAVING first_name LIKE '%e%' ORDER BY first_name DESC;
```

Database Output:

| | first_name | booking_id | age | contact_no |
|---|-------------|------------|-----|--------------|
| 1 | Sunder | 0200017 | 54 | 919999999923 |
| 2 | Somesh | 0200013 | 33 | 919999999914 |
| 3 | Shreya | 0200019 | 8 | 919999999187 |
| 4 | Raghavendra | 0100008 | 42 | 919999999992 |
| 5 | Eeshwar | 0100007 | 53 | 919999999993 |
| 6 | Deepak | 0200014 | 19 | 919999999915 |
| 7 | Cheman | 0100006 | 35 | 919999999994 |