DBMS Lab Assignment-5

Name:- M.Sai Chaitra

Roll No. :-19BCS065.

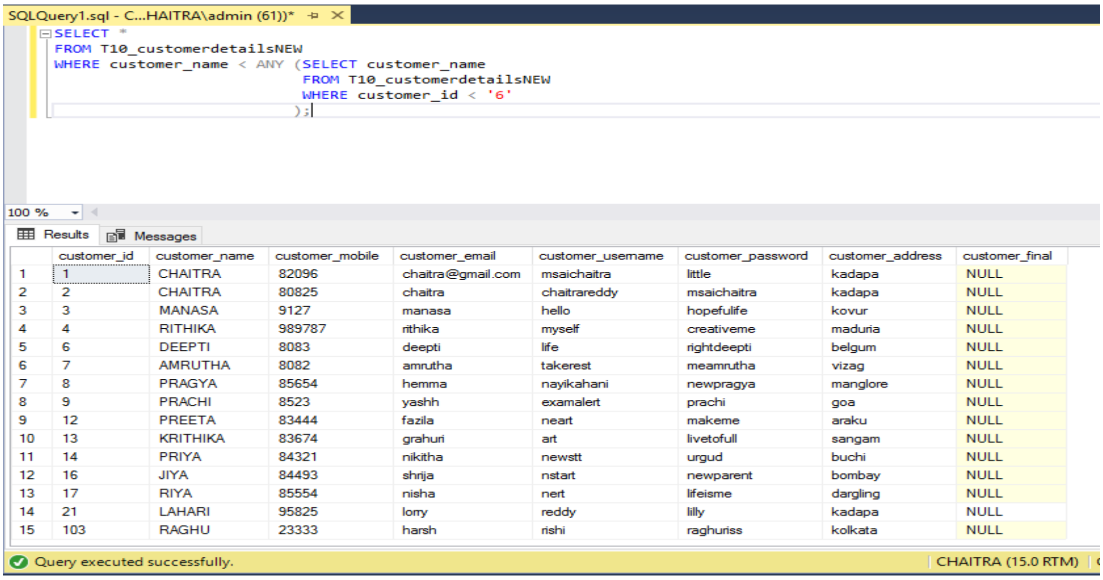
Database:- Travel Agency

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**

Query 1 for ANY:-

```
SELECT *
FROM T10_customerdetailsNEW
WHERE customer_name < ANY (SELECT customer_name
                    FROM T10_customerdetailsNEW
                                        WHERE customer_id < '6'
                                       );
```

Output:-



SQLQuery1.sql - C...HAITRA\admin (61))*

```
SELECT *
FROM T10_customerdetailsNEW
WHERE customer_name < ANY (SELECT customer_name
                           FROM T10_customerdetailsNEW
                           WHERE customer_id < '6'
                          );
```

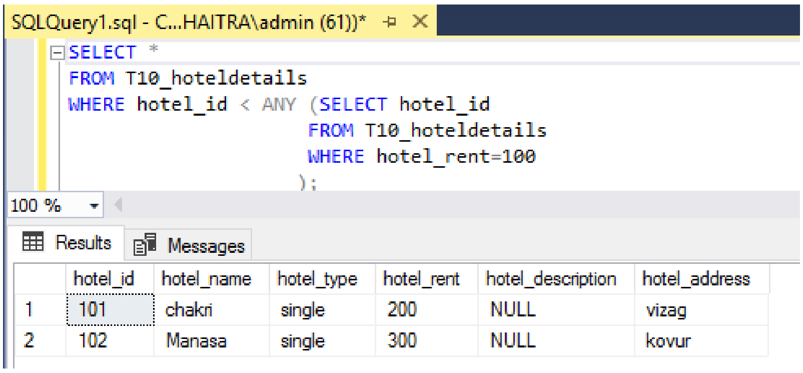
	customer_id	customer_name	customer_mobile	customer_email	customer_usemame	customer_password	customer_address	customer_final
1	1	CHAITRA	82096	chaitra@gmail.com	msaichaitra	little	kadapa	NULL
2	2	CHAITRA	80825	chaitra	chaitrareddy	msaichaitra	kadapa	NULL
3	3	MANASA	9127	manasa	hello	hopefulife	kovur	NULL
4	4	RITHIKA	989787	rithika	myself	creativeme	maduria	NULL
5	6	DEEPTI	8083	deepti	life	rightdeepti	belgum	NULL
6	7	AMRUTHA	8082	amrutha	takerest	meamrutha	vizag	NULL
7	8	PRAGYA	85654	hemma	nayikahani	newpragya	manglore	NULL
8	9	PRACHI	8523	yashh	examalert	prachi	goa	NULL
9	12	PREETA	83444	fazila	neart	makeme	araku	NULL
10	13	KRITHIKA	83674	grahuri	art	livetofull	sangam	NULL
11	14	PRIYA	84321	nikitha	newstt	urgud	buchi	NULL
12	16	JIYA	84493	shrija	nstart	newparent	bombay	NULL
13	17	RIYA	85554	nisha	nert	lifeisme	dargling	NULL
14	21	LAHARI	95825	lorry	reddy	lilly	kadapa	NULL
15	103	RAGHU	23333	harsh	rishi	raghuriss	kolkata	NULL

Query executed successfully.

Query 2 for ANY:-

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

Output:-



SQLQuery1.sql - C...HAITRA\admin (61))*

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

100 %

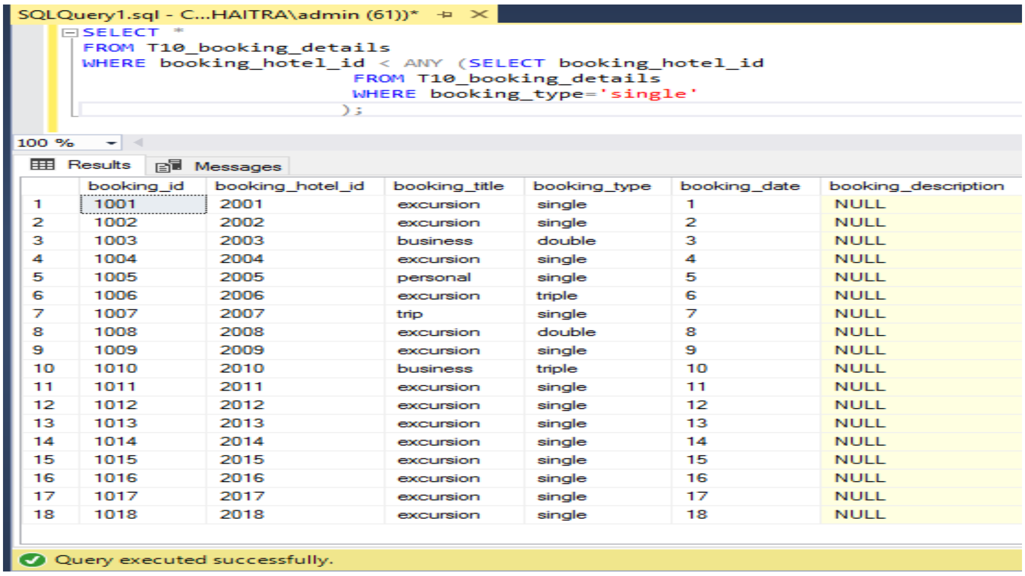
Results | Messages

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

Query 3 for ANY:-

```
SELECT *
FROM T10_booking_details
WHERE booking_hotel_id < ANY (SELECT booking_hotel_id
                    FROM T10_booking_details
                            WHERE booking_type='single'
                          );
```

Output:-



SQLQuery1.sql - C...HAITRA\admin (61))*

```
SELECT *
FROM T10_booking_details
WHERE booking_hotel_id < ANY (SELECT booking_hotel_id
                                 FROM T10_booking_details
                                 WHERE booking_type='single'
                               );
```

100 %

Results | Messages

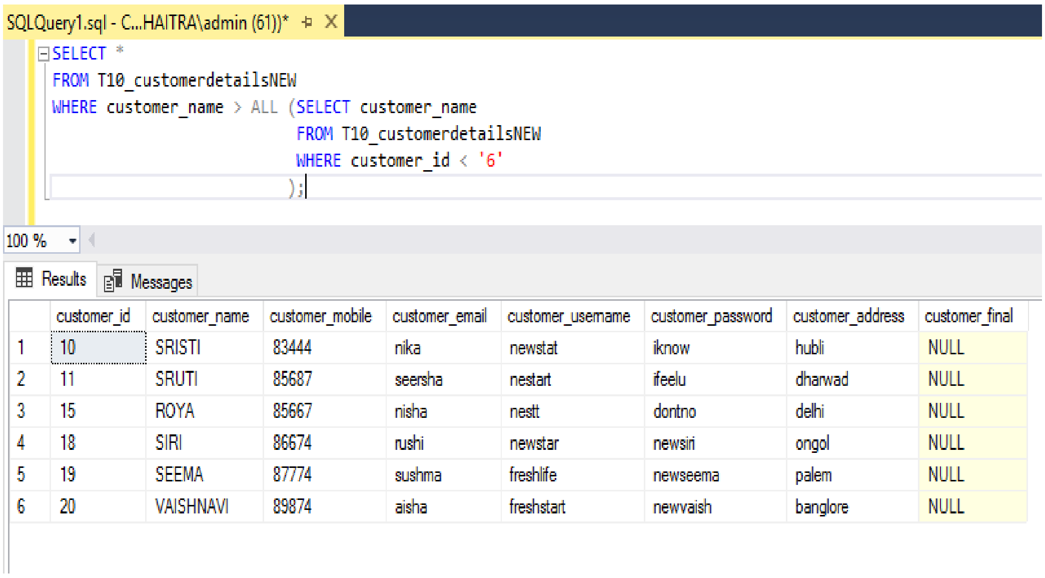
	booking_id	booking_hotel_id	booking_title	booking_type	booking_date	booking_description
1	1001	2001	excursion	single	1	NULL
2	1002	2002	excursion	single	2	NULL
3	1003	2003	business	double	3	NULL
4	1004	2004	excursion	single	4	NULL
5	1005	2005	personal	single	5	NULL
6	1006	2006	excursion	triple	6	NULL
7	1007	2007	trip	single	7	NULL
8	1008	2008	excursion	double	8	NULL
9	1009	2009	excursion	single	9	NULL
10	1010	2010	business	triple	10	NULL
11	1011	2011	excursion	single	11	NULL
12	1012	2012	excursion	single	12	NULL
13	1013	2013	excursion	single	13	NULL
14	1014	2014	excursion	single	14	NULL
15	1015	2015	excursion	single	15	NULL
16	1016	2016	excursion	single	16	NULL
17	1017	2017	excursion	single	17	NULL
18	1018	2018	excursion	single	18	NULL

Query executed successfully.

Query 1 for ALL:-

```
SELECT *
FROM T10_customerdetailsNEW
WHERE customer_name > ALL (SELECT customer_name
                     FROM T10_customerdetailsNEW
                                   WHERE customer_id < '6'
                                  );
```

Output:-



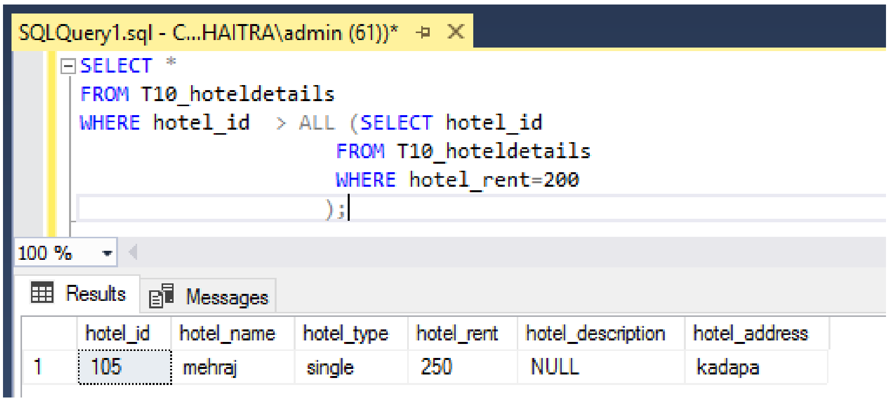
```
SELECT *
FROM T10_customerdetailsNEW
WHERE customer_name > ALL (SELECT customer_name
                           FROM T10_customerdetailsNEW
                           WHERE customer_id < '6'
                          );
```

	customer_id	customer_name	customer_mobile	customer_email	customer_username	customer_password	customer_address	customer_final
1	10	SRISTI	83444	nika	newstat	iknow	hubli	NULL
2	11	SRUTI	85687	seersha	nestart	ifeelu	dharwad	NULL
3	15	ROYA	85667	nisha	nestt	dontno	delhi	NULL
4	18	SIRI	86674	rushi	newstar	newsiri	ongol	NULL
5	19	SEEMA	87774	sushma	freshlife	newseema	palem	NULL
6	20	VAISHNAVI	89874	aisha	freshstart	newvaish	banglore	NULL

Query 2 for ALL:-

```
SELECT *
FROM T10_hoteldetails
WHERE hotel_id  > ALL (SELECT hotel_id
                 FROM T10_hoteldetails
                              WHERE hotel_rent=200
                             );
```

Output:-



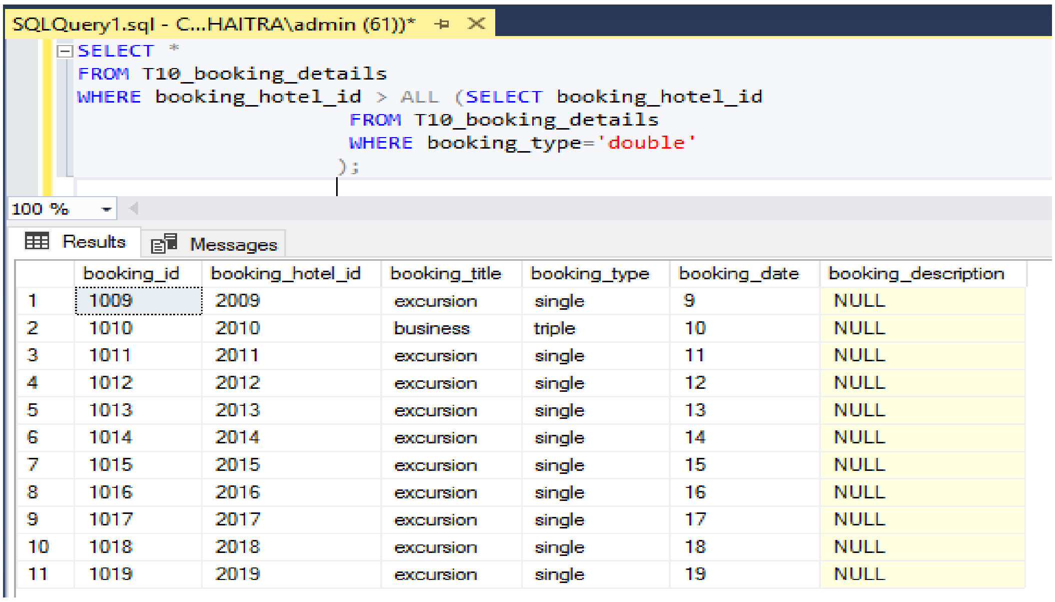
```
SELECT *
FROM T10_hoteldetails
WHERE hotel_id  > ALL (SELECT hotel_id
                       FROM T10_hoteldetails
                       WHERE hotel_rent=200
                      );
```

	hotel_id	hotel_name	hotel_type	hotel_rent	hotel_description	hotel_address
1	105	mehraj	single	250	NULL	kadapa

Query 3 for ALL:-

```
SELECT *
FROM T10_booking_details
WHERE booking_hotel_id > ALL (SELECT booking_hotel_id
                    FROM T10_booking_details
                                        WHERE booking_type='double'
                                       );
```

Output:-



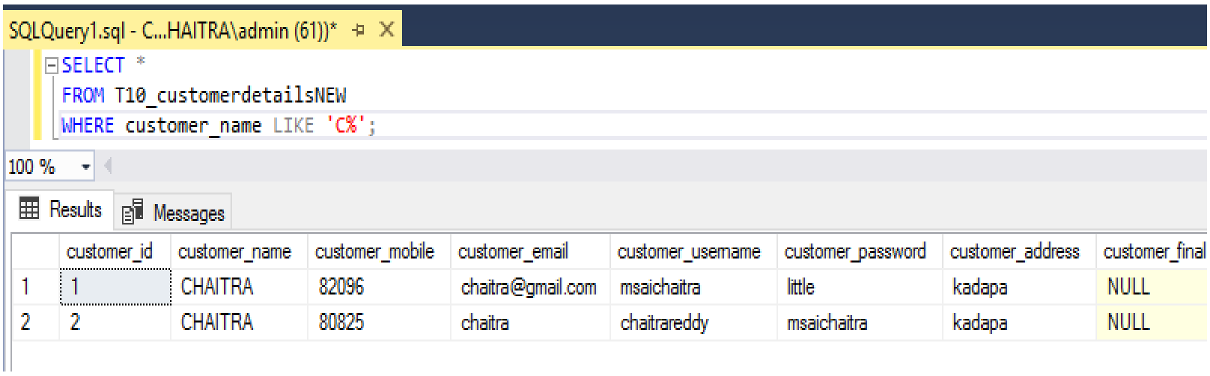
```
SELECT *
FROM T10_booking_details
WHERE booking_hotel_id > ALL (SELECT booking_hotel_id
                              FROM T10_booking_details
                              WHERE booking_type='double'
                             );
```

	booking_id	booking_hotel_id	booking_title	booking_type	booking_date	booking_description
1	1009	2009	excursion	single	9	NULL
2	1010	2010	business	triple	10	NULL
3	1011	2011	excursion	single	11	NULL
4	1012	2012	excursion	single	12	NULL
5	1013	2013	excursion	single	13	NULL
6	1014	2014	excursion	single	14	NULL
7	1015	2015	excursion	single	15	NULL
8	1016	2016	excursion	single	16	NULL
9	1017	2017	excursion	single	17	NULL
10	1018	2018	excursion	single	18	NULL
11	1019	2019	excursion	single	19	NULL

Query 1 for LIKE:-

```
SELECT *
FROM T10_customerdetailsNEW
WHERE customer_name LIKE 'C%';
```

Output:-



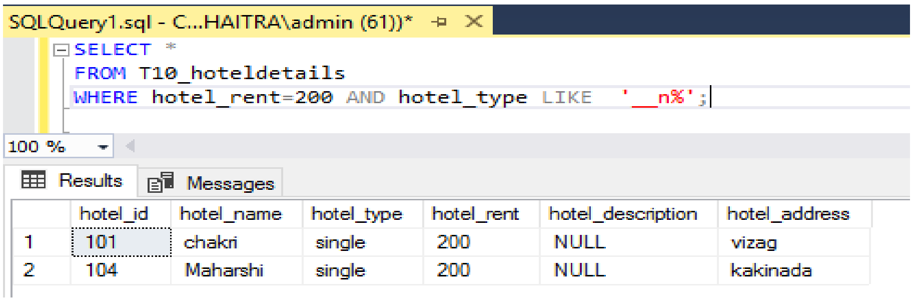
```
SELECT *
FROM T10_customerdetailsNEW
WHERE customer_name LIKE 'C%';
```

	customer_id	customer_name	customer_mobile	customer_email	customer_usemame	customer_password	customer_address	customer_final
1	1	CHAITRA	82096	chaitra@gmail.com	msaichaitra	little	kadapa	NULL
2	2	CHAITRA	80825	chaitra	chaitrareddy	msaichaitra	kadapa	NULL

Query 2 for LIKE:-

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

Output:-



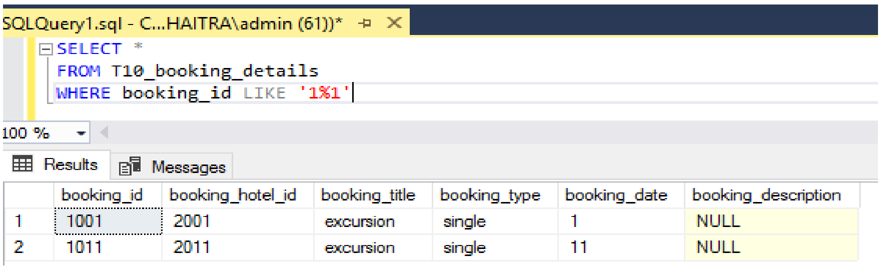
```
SELECT *
FROM T10_hoteldetails
WHERE hotel_rent=200 AND hotel_type LIKE  '__n%';
```

	hotel_id	hotel_name	hotel_type	hotel_rent	hotel_description	hotel_address
1	101	chakri	single	200	NULL	vizag
2	104	Maharshi	single	200	NULL	kakinada

Query 3 for LIKE:-

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

Output:-



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

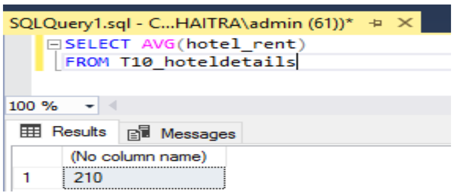
	booking_id	booking_hotel_id	booking_title	booking_type	booking_date	booking_description
1	1001	2001	excursion	single	1	NULL
2	1011	2011	excursion	single	11	NULL

2. One query for each Aggregate function.

Query for AVG():-

```
SELECT AVG(hotel_rent)
FROM T10_hoteldetails
```

Output:-



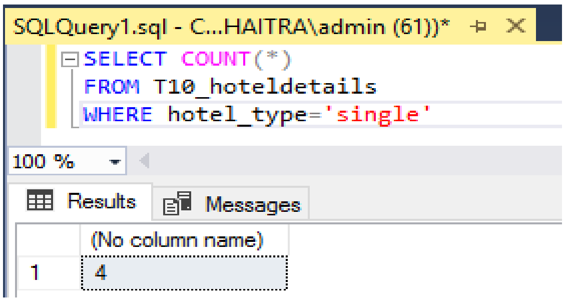
```
SELECT AVG(hotel_rent)
FROM T10_hoteldetails
```

	(No column name)
1	210

Query for COUNT():-

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

Output:-



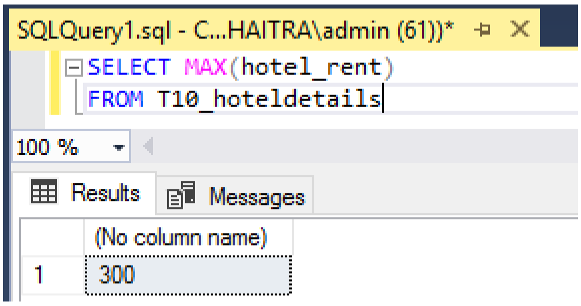
```
SELECT COUNT(*)
FROM T10_hoteldetails
WHERE hotel_type='single'
```

```
   (No column name)
1  4
```

Query for MAX():-

```
SELECT MAX(hotel_rent)
FROM T10_hoteldetails
```

Output:-



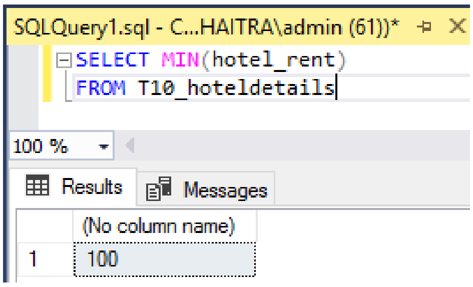
```
SELECT MAX(hotel_rent)
FROM T10_hoteldetails
```

```
   (No column name)
1  300
```

Query for MIN():-

```
SELECT MIN(hotel_rent)
FROM T10_hoteldetails
```

Output:-



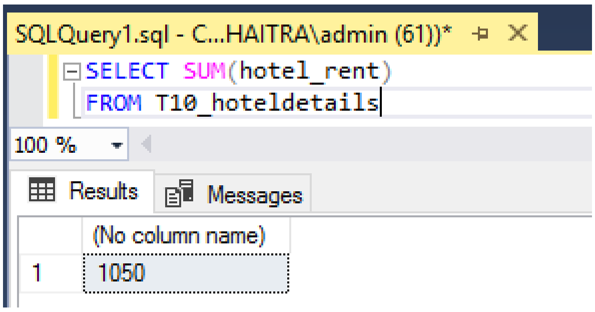
```
SELECT MIN(hotel_rent)
FROM T10_hoteldetails
```

```
   (No column name)
1  100
```

Query for SUM():-

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

Output:-



SQLQuery1.sql - C...HAITRA\admin (61))*

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

100 %

Results | Messages

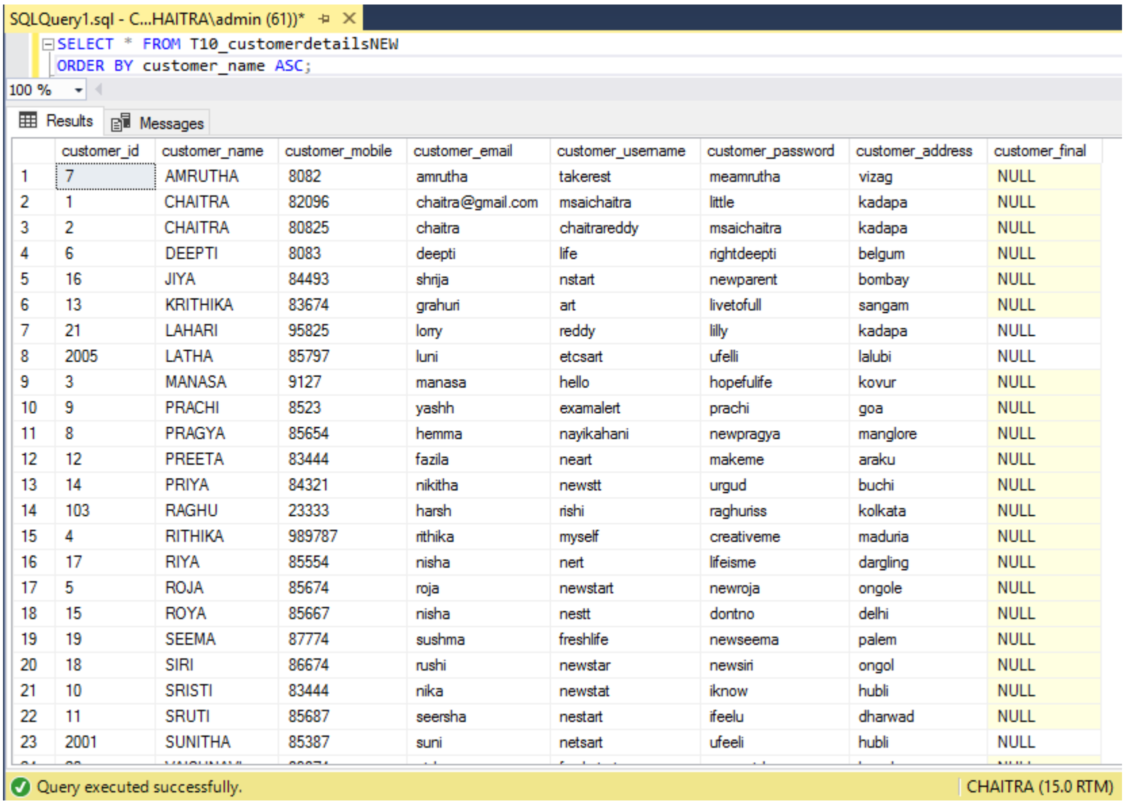
	(No column name)
1	1050

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

Query 1 for ORDER BY :-

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

Output:-



SQLQuery1.sql - C...HAITRA\admin (61))*

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

100 %

Results | Messages

	customer_id	customer_name	customer_mobile	customer_email	customer_username	customer_password	customer_address	customer_final
1	7	AMRUTHA	8082	amrutha	takerest	meamrutha	vizag	NULL
2	1	CHAITRA	82096	chaitra@gmail.com	msaichaitra	little	kadapa	NULL
3	2	CHAITRA	80825	chaitra	chaitrareddy	msaichaitra	kadapa	NULL
4	6	DEEPTI	8083	deepti	life	rightdeepti	belgum	NULL
5	16	JIYA	84493	shrija	nstart	newparent	bombay	NULL
6	13	KRITHIKA	83674	grahuri	art	livetofull	sangam	NULL
7	21	LAHARI	95825	lorry	reddy	lilly	kadapa	NULL
8	2005	LATHA	85797	luni	etcsart	ufelli	lalubi	NULL
9	3	MANASA	9127	manasa	hello	hopefulife	kovur	NULL
10	9	PRACHI	8523	yashh	examalert	prachi	goa	NULL
11	8	PRAGYA	85654	hemma	nayikahani	newpragya	manglore	NULL
12	12	PREETA	83444	fazila	neart	makeme	araku	NULL
13	14	PRIYA	84321	nikitha	newstt	urgud	buchi	NULL
14	103	RAGHU	23333	harsh	rishi	raghuriss	kolkata	NULL
15	4	RITHIKA	989787	rithika	myself	creativeme	maduria	NULL
16	17	RIYA	85554	nisha	nert	lifeisme	dargling	NULL
17	5	ROJA	85674	roja	newstart	newroja	ongole	NULL
18	15	ROYA	85667	nisha	nestt	dontno	delhi	NULL
19	19	SEEMA	87774	sushma	freshlife	newseema	palem	NULL
20	18	SIRI	86674	rushi	newstar	newsiri	ongol	NULL
21	10	SRISTI	83444	nika	newstat	iknow	hubli	NULL
22	11	SRUTI	85687	seersha	nestart	ifeelu	dharwad	NULL
23	2001	SUNITHA	85387	suni	netsart	ufeeli	hubli	NULL

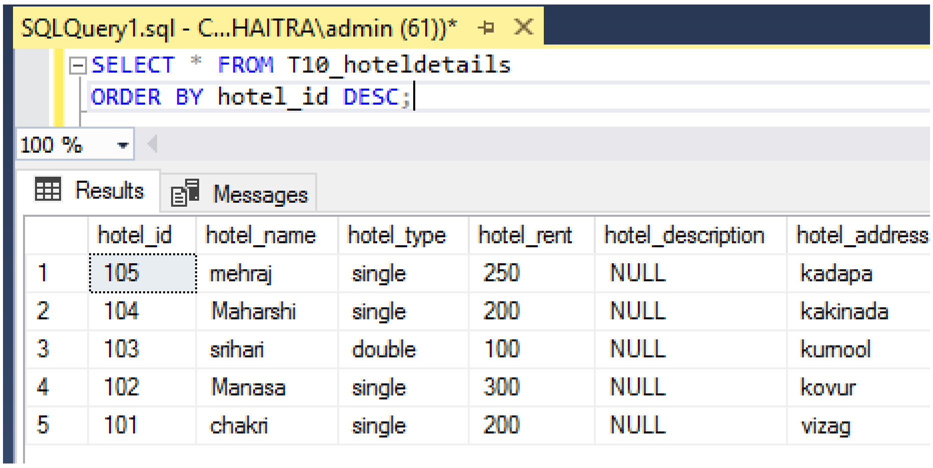
Query executed successfully.

CHAITRA (15.0 RTM)

Query 2 for ORDER BY :-

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

Output:-



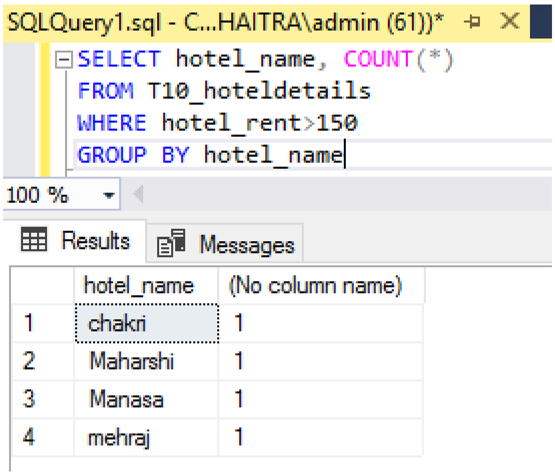
```
SELECT * FROM T10_hoteldetails
ORDER BY hotel_id DESC;
```

	hotel_id	hotel_name	hotel_type	hotel_rent	hotel_description	hotel_address
1	105	mehraj	single	250	NULL	kadapa
2	104	Maharshi	single	200	NULL	kakinada
3	103	srihari	double	100	NULL	kurnool
4	102	Manasa	single	300	NULL	kovur
5	101	chakri	single	200	NULL	vizag

Query 1 for GROUP BY :-

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

Output:-



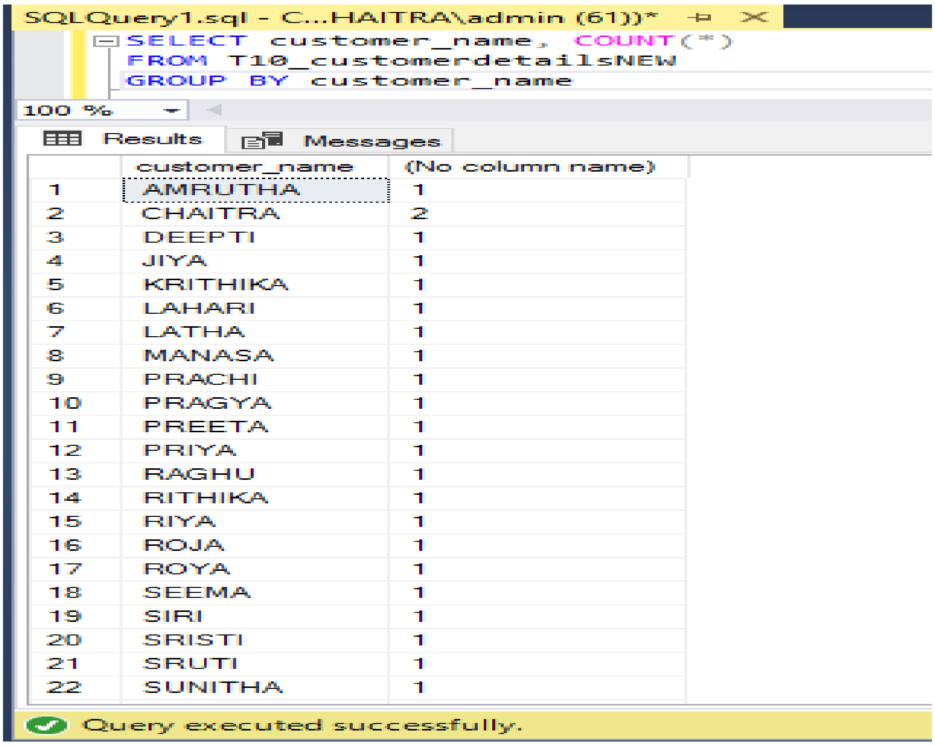
```
SELECT hotel_name, COUNT(*)
FROM T10_hoteldetails
WHERE hotel_rent>150
GROUP BY hotel_name
```

	hotel_name	(No column name)
1	chakri	1
2	Maharshi	1
3	Manasa	1
4	mehraj	1

Query 2 for GROUP BY :-

```
SELECT customer_name, COUNT(*)
FROM T10_customerdetailsNEW
GROUP BY customer_name
```

Output:-



SQLQuery1.sql - C...HAITRA\admin (61))*

```
SELECT customer_name, COUNT(*)
FROM T10_customerdetailsNEW
GROUP BY customer_name
```

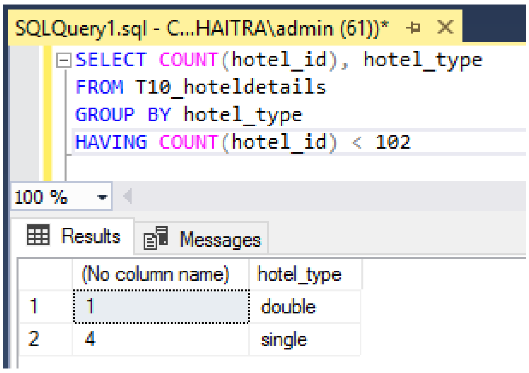
	customer_name	(No column name)
1	AMRUTHA	1
2	CHAITRA	2
3	DEEPTI	1
4	JIYA	1
5	KRITHIKA	1
6	LAHARI	1
7	LATHA	1
8	MANASA	1
9	PRACHI	1
10	PRAGYA	1
11	PREETA	1
12	PRIYA	1
13	RAGHU	1
14	RITHIKA	1
15	RIYA	1
16	ROJA	1
17	ROYA	1
18	SEEMA	1
19	SIRI	1
20	SRISTI	1
21	SRUTI	1
22	SUNITHA	1

Query executed successfully.

Query 1 for HAVING CLAUSE :-

```
SELECT COUNT(hotel_id), hotel_type
FROM T10_hoteldetails
GROUP BY hotel_type
HAVING COUNT(hotel_id) < 102
```

Output:-



SQLQuery1.sql - C...HAITRA\admin (61))*

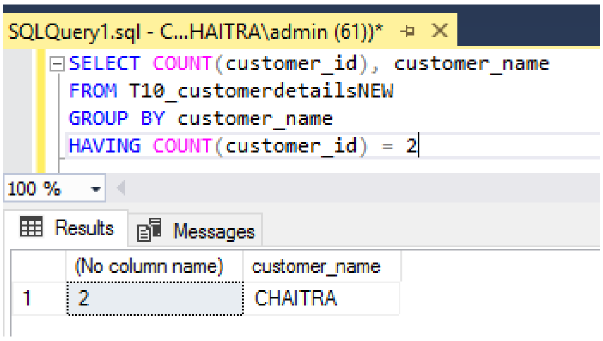
```
SELECT COUNT(hotel_id), hotel_type
FROM T10_hoteldetails
GROUP BY hotel_type
HAVING COUNT(hotel_id) < 102
```

	(No column name)	hotel_type
1	1	double
2	4	single

Query 2 for HAVING CLAUSE :-

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

Output:-



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

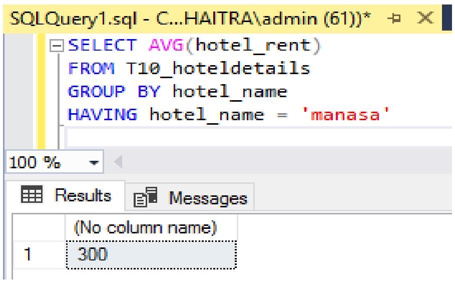
	(No column name)	customer_name
1	2	CHAITRA

4. Use Aggregate function with group by and having

Query for AVG():-

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

Output:-



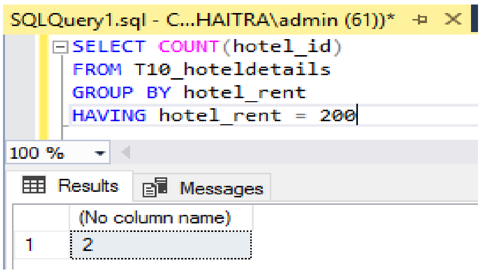
```
SELECT AVG(hotel_rent)
FROM T10_hoteldetails
GROUP BY hotel_name
HAVING hotel_name = 'manasa'
```

	(No column name)
1	300

Query for COUNT():-

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

Output:-



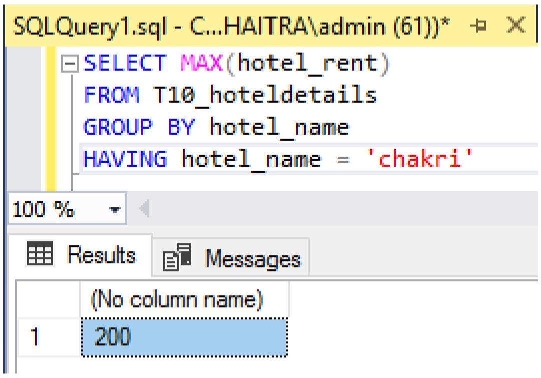
```
SELECT COUNT(hotel_id)
FROM T10_hoteldetails
GROUP BY hotel_rent
HAVING hotel_rent = 200
```

	(No column name)
1	2

Query for MAX():-

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

Output:-



SQLQuery1.sql - C...HAITRA\admin (61))*

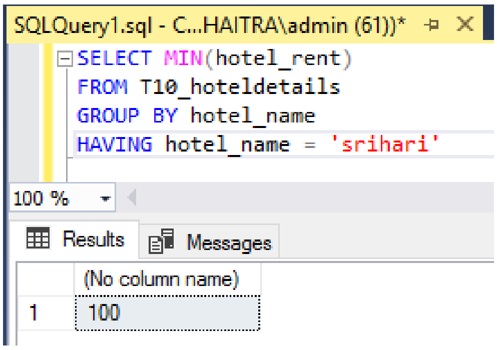
```
SELECT MAX(hotel_rent)
FROM T10_hoteldetails
GROUP BY hotel_name
HAVING hotel_name = 'chakri'
```

```
  (No column name)
1 200
```

Query for MIN():-

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

Output:-



SQLQuery1.sql - C...HAITRA\admin (61))*

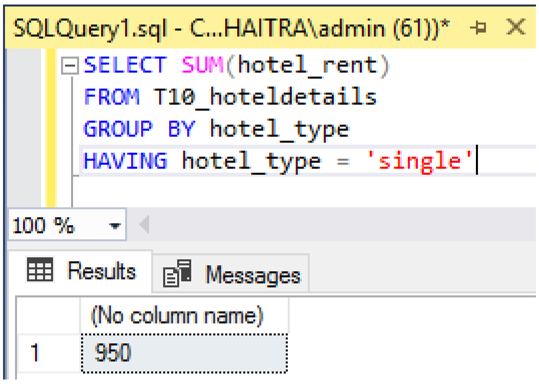
```
SELECT MIN(hotel_rent)
FROM T10_hoteldetails
GROUP BY hotel_name
HAVING hotel_name = 'srihari'
```

```
  (No column name)
1 100
```

Query for SUM():-

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

Output:-



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

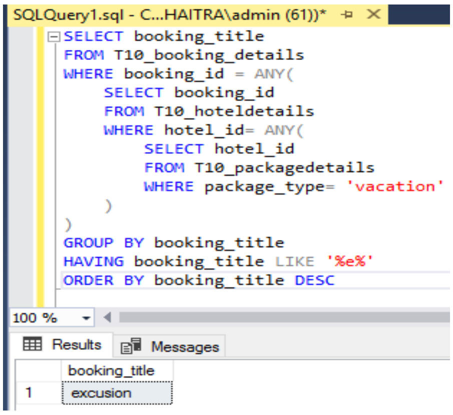
```
   (No column name)
1  950
```

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

Query:-

```
SELECT booking_title
FROM T10_booking_details
WHERE booking_id = ANY(
   SELECT booking_id
   FROM T10_hoteldetails
   WHERE hotel_id= ANY(
      SELECT hotel_id
      FROM T10_packagedetails
      WHERE package_type= 'vacation'
   )
)
GROUP BY booking_title
HAVING booking_title LIKE '%e%'
ORDER BY booking_title DESC
```

Output:-



```
SELECT booking_title
FROM T10_booking_details
WHERE booking_id = ANY(
    SELECT booking_id
    FROM T10_hoteldetails
    WHERE hotel_id= ANY(
        SELECT hotel_id
        FROM T10_packagedetails
        WHERE package_type= 'vacation'
    )
)
GROUP BY booking_title
HAVING booking_title LIKE '%e%'
ORDER BY booking_title DESC
```

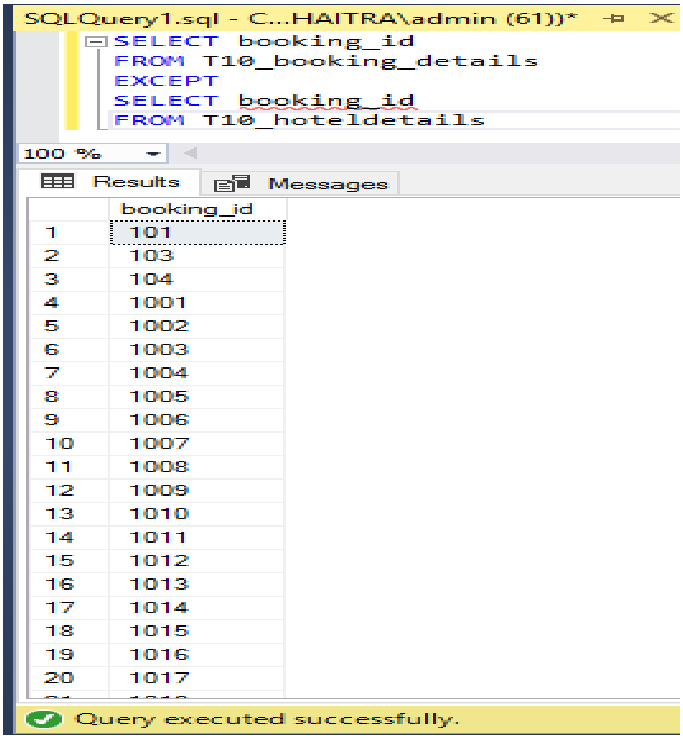
```
   booking_title
1  excusion
```

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

Query for EXCEPT:-

```
SELECT booking_id
FROM T10_booking_details
EXCEPT
SELECT booking_id
FROM T10_hoteldetails
```

Output:-



SQLQuery1.sql - C...HAITRA\admin (61))*

```
SELECT booking_id
FROM T10_booking_details
EXCEPT
SELECT booking_id
FROM T10_hoteldetails
```

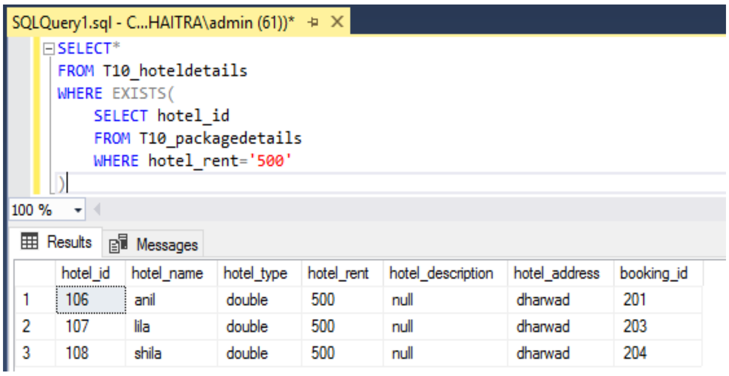
```
    booking_id
1   101
2   103
3   104
4   1001
5   1002
6   1003
7   1004
8   1005
9   1006
10  1007
11  1008
12  1009
13  1010
14  1011
15  1012
16  1013
17  1014
18  1015
19  1016
20  1017
```

Query executed successfully.

Query for EXISTS:-

```
SELECT*
FROM T10_hoteldetails
WHERE EXISTS(
   SELECT hotel_id
   FROM T10_packagedetails
   WHERE hotel_rent='500'
)
```

Output:-



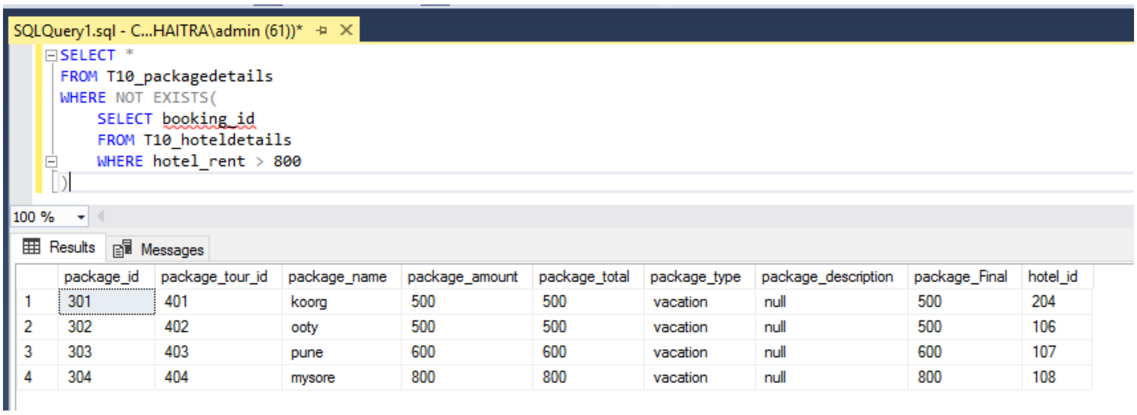
```
SELECT*
FROM T10_hoteldetails
WHERE EXISTS(
    SELECT hotel_id
    FROM T10_packagedetails
    WHERE hotel_rent='500'
)
```

	hotel_id	hotel_name	hotel_type	hotel_rent	hotel_description	hotel_address	booking_id
1	106	anil	double	500	null	dharwad	201
2	107	lila	double	500	null	dharwad	203
3	108	shila	double	500	null	dharwad	204

Query for NOT EXISTS:-

```
SELECT *
FROM T10_packagedetails
WHERE NOT EXISTS(
    SELECT booking_id
    FROM T10_hoteldetails
    WHERE hotel_rent > 800
)
```

Output:-



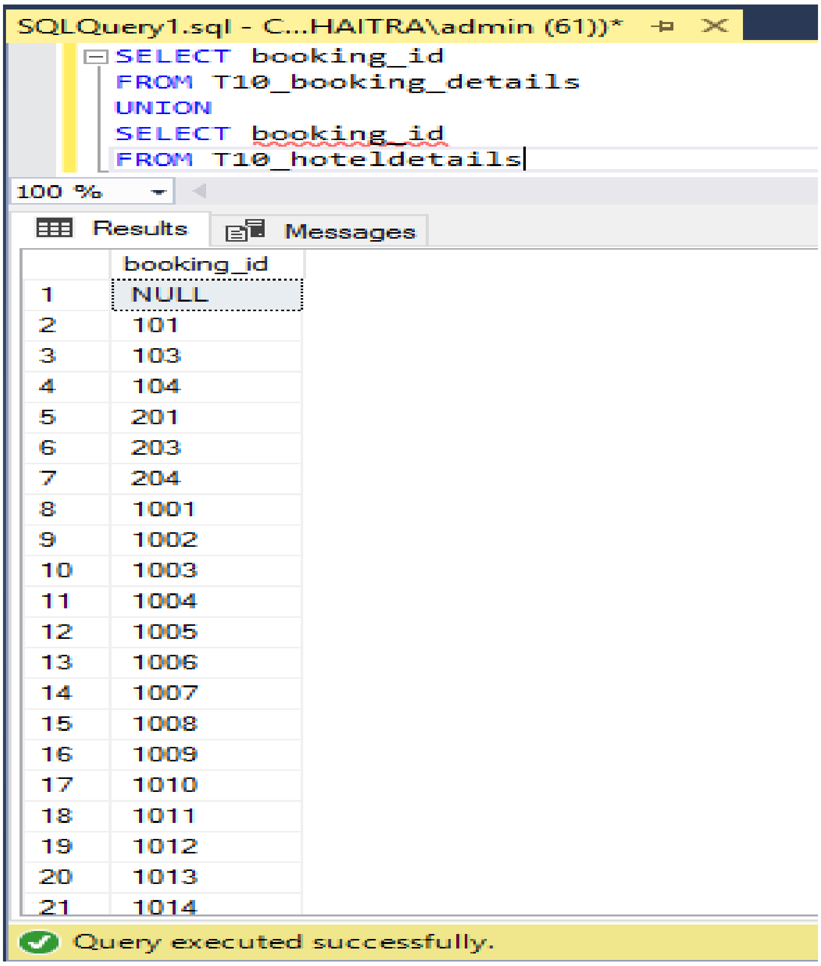
```
SELECT *
FROM T10_packagedetails
WHERE NOT EXISTS(
    SELECT booking_id
    FROM T10_hoteldetails
    WHERE hotel_rent > 800
)
```

	package_id	package_tour_id	package_name	package_amount	package_total	package_type	package_description	package_Final	hotel_id
1	301	401	koorg	500	500	vacation	null	500	204
2	302	402	ooty	500	500	vacation	null	500	106
3	303	403	pune	600	600	vacation	null	600	107
4	304	404	mysore	800	800	vacation	null	800	108

Query for UNION:-

```
SELECT booking_id
FROM T10_booking_details
UNION
SELECT booking_id
FROM T10_hoteldetails
```

Output:-



```
SELECT booking_id
FROM T10_booking_details
UNION
SELECT booking_id
FROM T10_hoteldetails
```

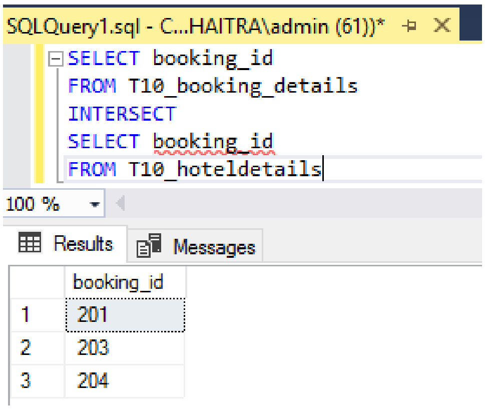
	booking_id
1	NULL
2	101
3	103
4	104
5	201
6	203
7	204
8	1001
9	1002
10	1003
11	1004
12	1005
13	1006
14	1007
15	1008
16	1009
17	1010
18	1011
19	1012
20	1013
21	1014

Query executed successfully.

Query for INTERSECTION:-

```
SELECT booking_id
FROM T10_booking_details
INTERSECT
SELECT booking_id
FROM T10_hoteldetails
```

Output:-



```
SELECT booking_id
FROM T10_booking_details
INTERSECT
SELECT booking_id
FROM T10_hoteldetails
```

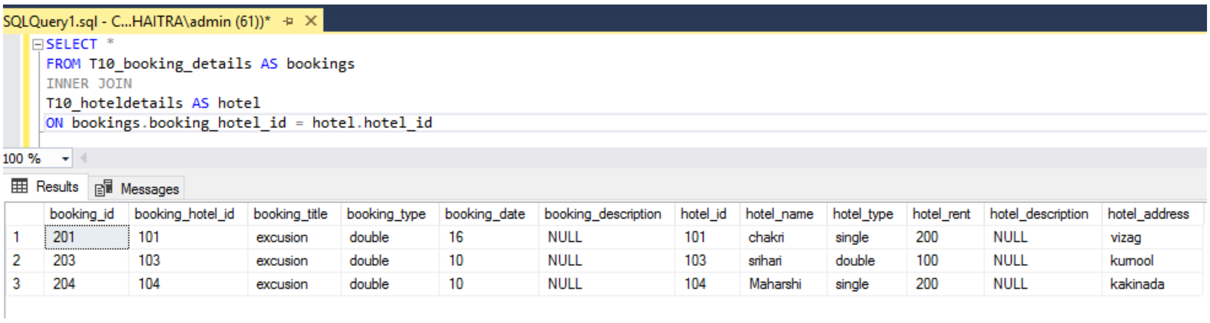
	booking_id
1	201
2	203
3	204

7. INNER JOIN, LEFT OUTER JOIN, RIGHT OUTER JOIN- 3 queries for each instance

Query 1 for INNER JOIN :-

```
SELECT *
FROM T10_booking_details AS bookings
INNER JOIN
T10_hoteldetails AS hotel
ON bookings.booking_hotel_id = hotel.hotel_id
```

Output:-



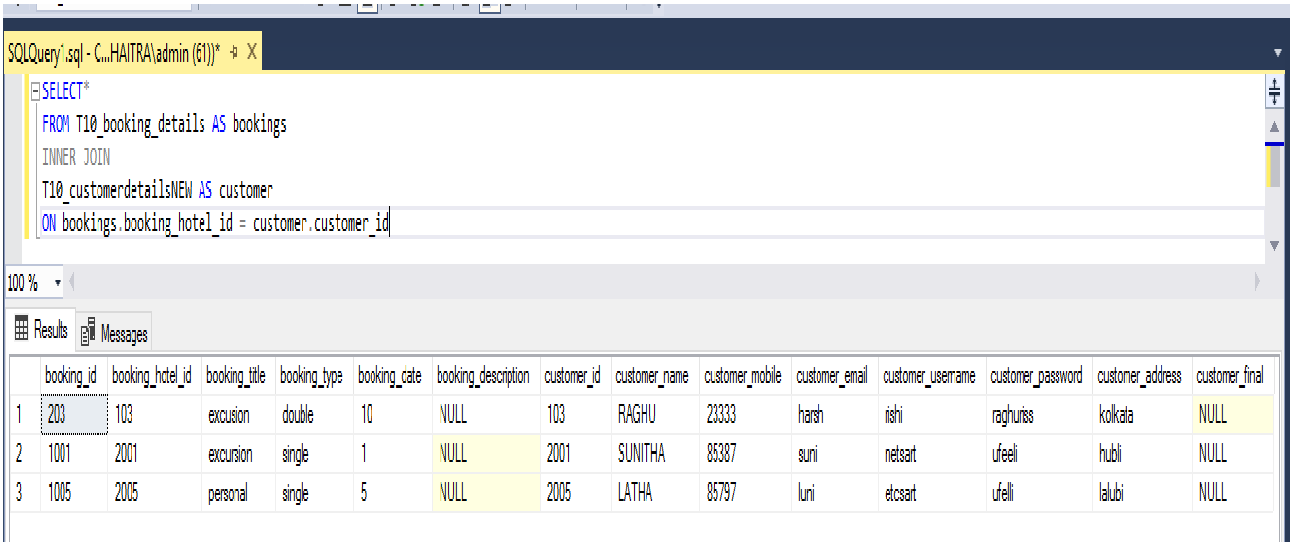
```
SELECT *
FROM T10_booking_details AS bookings
INNER JOIN
T10_hoteldetails AS hotel
ON bookings.booking_hotel_id = hotel.hotel_id
```

	booking_id	booking_hotel_id	booking_title	booking_type	booking_date	booking_description	hotel_id	hotel_name	hotel_type	hotel_rent	hotel_description	hotel_address
1	201	101	excusion	double	16	NULL	101	chakri	single	200	NULL	vizag
2	203	103	excusion	double	10	NULL	103	srihari	double	100	NULL	kurnool
3	204	104	excusion	double	10	NULL	104	Maharshi	single	200	NULL	kakinada

Query 2 for INNER JOIN :-

```
SELECT*
FROM T10_booking_details AS bookings
INNER JOIN
T10_customerdetailsNEW AS customer
ON bookings.booking_hotel_id = customer.customer_id
```

Output:-



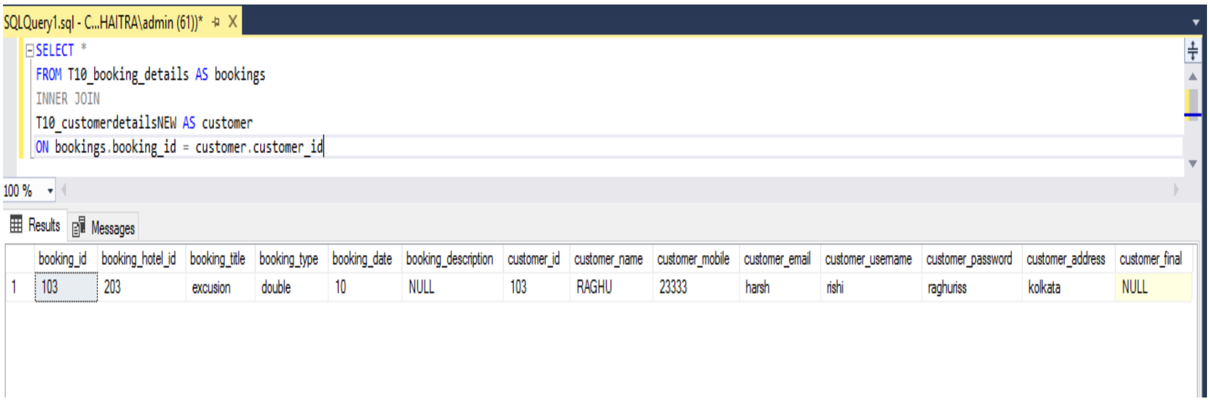
```
SELECT*
FROM T10_booking_details AS bookings
INNER JOIN
T10_customerdetailsNEW AS customer
ON bookings.booking_hotel_id = customer.customer_id
```

	booking_id	booking_hotel_id	booking_title	booking_type	booking_date	booking_description	customer_id	customer_name	customer_mobile	customer_email	customer_username	customer_password	customer_address	customer_final
1	203	103	excusion	double	10	NULL	103	RAGHU	23333	harsh	rishi	raghuriss	kolkata	NULL
2	1001	2001	excursion	single	1	NULL	2001	SUNITHA	85387	suni	netsart	ufeeli	hubli	NULL
3	1005	2005	personal	single	5	NULL	2005	LATHA	85797	luni	etcsart	ufelli	lalubi	NULL

Query 3 for INNER JOIN :-

```
SELECT *
FROM T10_booking_details AS bookings
INNER JOIN
T10_customerdetailsNEW AS customer
ON bookings.booking_id = customer.customer_id
```

Output:-



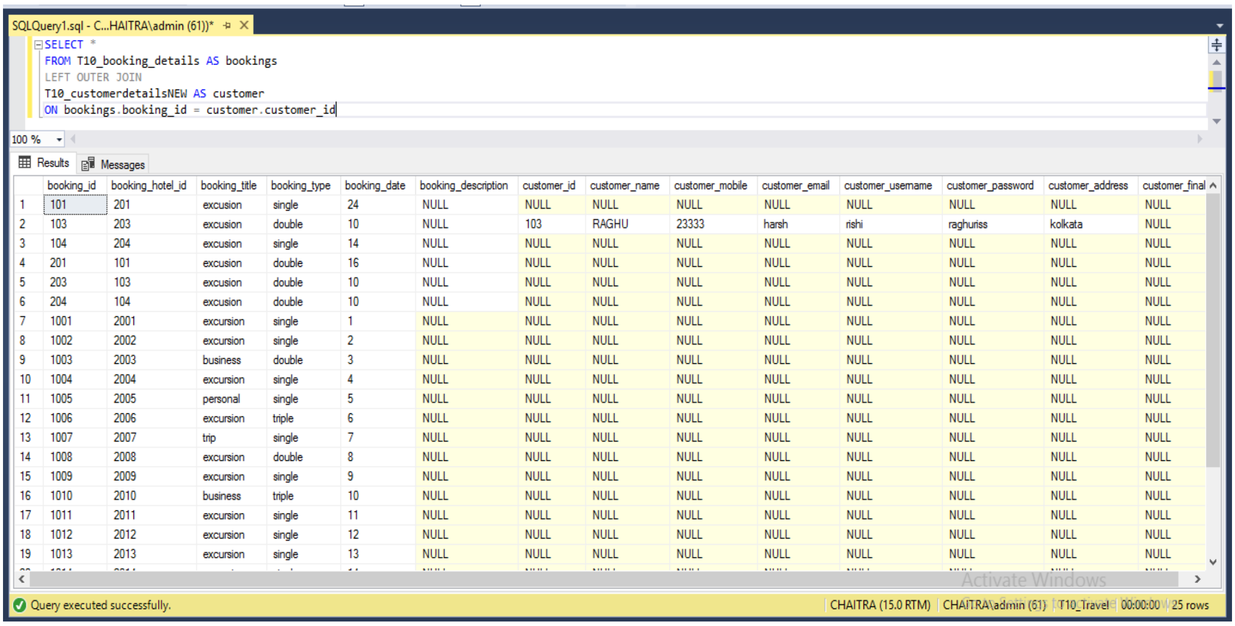
```
SELECT *
FROM T10_booking_details AS bookings
INNER JOIN
T10_customerdetailsNEW AS customer
ON bookings.booking_id = customer.customer_id
```

	booking_id	booking_hotel_id	booking_title	booking_type	booking_date	booking_description	customer_id	customer_name	customer_mobile	customer_email	customer_username	customer_password	customer_address	customer_final
1	103	203	excusion	double	10	NULL	103	RAGHU	23333	harsh	rishi	raghuriss	kolkata	NULL

Query 1 for LEFT OUTER JOIN :-

```
SELECT *
FROM T10_booking_details AS bookings
LEFT OUTER JOIN
T10_customerdetailsNEW AS customer
ON bookings.booking_id = customer.customer_id
```

Output:-



```
SELECT *
FROM T10_booking_details AS bookings
LEFT OUTER JOIN
T10_customerdetailsNEW AS customer
ON bookings.booking_id = customer.customer_id
```

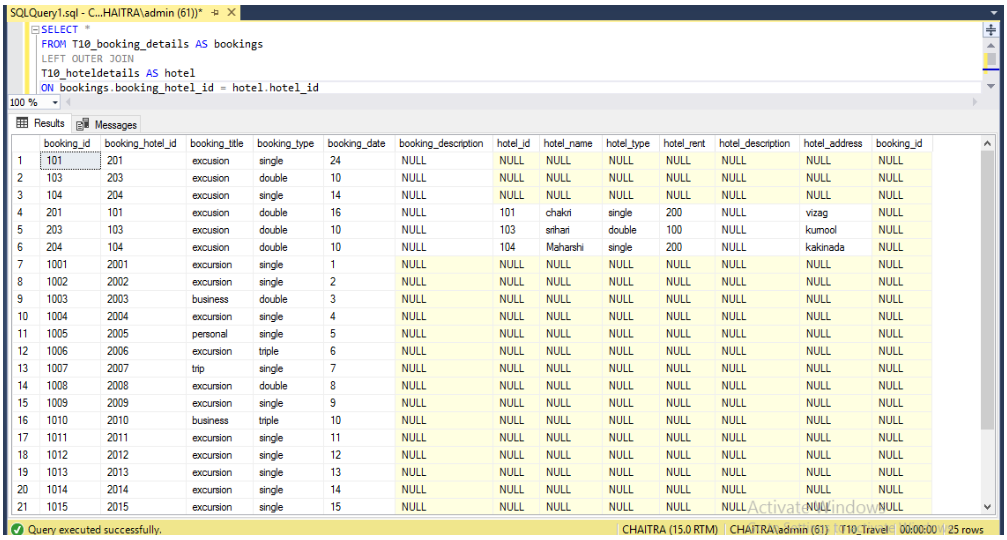
	booking_id	booking_hotel_id	booking_title	booking_type	booking_date	booking_description	customer_id	customer_name	customer_mobile	customer_email	customer_username	customer_password	customer_address	customer_final
1	101	201	excusion	single	24	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
2	103	203	excusion	double	10	NULL	103	RAGHU	23333	harsh	rishi	raghuriss	kolkata	NULL
3	104	204	excusion	single	14	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
4	201	101	excusion	double	16	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
5	203	103	excusion	double	10	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
6	204	104	excusion	double	10	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
7	1001	2001	excursion	single	1	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
8	1002	2002	excursion	single	2	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
9	1003	2003	business	double	3	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
10	1004	2004	excursion	single	4	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
11	1005	2005	personal	single	5	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
12	1006	2006	excursion	triple	6	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
13	1007	2007	trip	single	7	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
14	1008	2008	excursion	double	8	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
15	1009	2009	excursion	single	9	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
16	1010	2010	business	triple	10	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
17	1011	2011	excursion	single	11	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
18	1012	2012	excursion	single	12	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
19	1013	2013	excursion	single	13	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Query executed successfully.

Query 2 for LEFT OUTER JOIN :-

```
SELECT *
FROM T10_booking_details AS bookings
LEFT OUTER JOIN
T10_hoteldetails AS hotel
ON bookings.booking_hotel_id = hotel.hotel_id
```

Output:-



SQLQuery1.sql - C...HAITRA\admin (61))*

```
SELECT *
FROM T10_booking_details AS bookings
LEFT OUTER JOIN
T10_hoteldetails AS hotel
ON bookings.booking_hotel_id = hotel.hotel_id
```

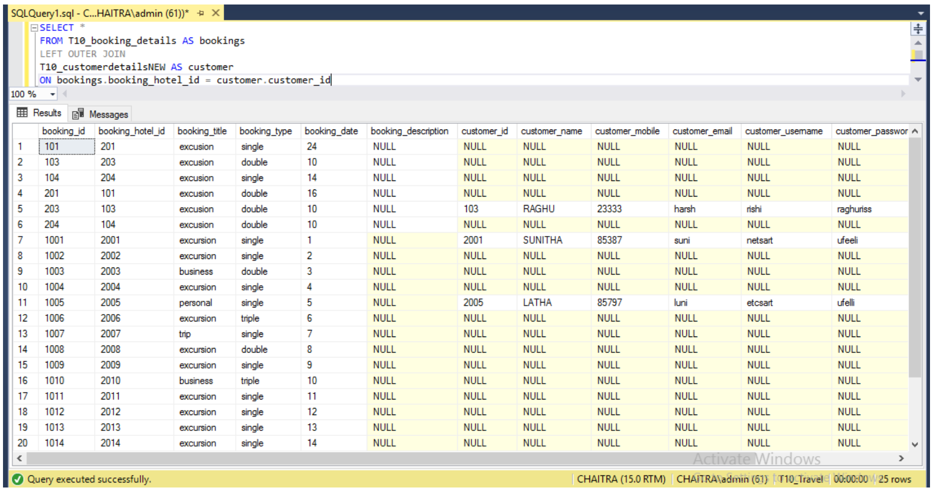
	booking_id	booking_hotel_id	booking_title	booking_type	booking_date	booking_description	hotel_id	hotel_name	hotel_type	hotel_rent	hotel_description	hotel_address	booking_id
1	101	201	excusion	single	24	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
2	103	203	excusion	double	10	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
3	104	204	excusion	single	14	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
4	201	101	excusion	double	16	NULL	101	chakri	single	200	NULL	vizag	NULL
5	203	103	excusion	double	10	NULL	103	srihari	double	100	NULL	kurnool	NULL
6	204	104	excusion	double	10	NULL	104	Maharshi	single	200	NULL	kakinada	NULL
7	1001	2001	excursion	single	1	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
8	1002	2002	excursion	single	2	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
9	1003	2003	business	double	3	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
10	1004	2004	excursion	single	4	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
11	1005	2005	personal	single	5	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
12	1006	2006	excursion	triple	6	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
13	1007	2007	trip	single	7	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
14	1008	2008	excursion	double	8	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
15	1009	2009	excursion	single	9	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
16	1010	2010	business	triple	10	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
17	1011	2011	excursion	single	11	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
18	1012	2012	excursion	single	12	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
19	1013	2013	excursion	single	13	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
20	1014	2014	excursion	single	14	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL
21	1015	2015	excursion	single	15	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Query executed successfully. | CHAITRA (15.0 RTM) | CHAITRA\admin (61) | T10_Travel | 00:00:00 | 25 rows

Query 3 for LEFT OUTER JOIN :-

```
SELECT *
FROM T10_booking_details AS bookings
LEFT OUTER JOIN
T10_customerdetailsNEW AS customer
ON bookings.booking_hotel_id = customer.customer_id
```

Output:-



SQLQuery1.sql - C...HAITRA\admin (61))*

```
SELECT *
FROM T10_booking_details AS bookings
LEFT OUTER JOIN
T10_customerdetailsNEW AS customer
ON bookings.booking_hotel_id = customer.customer_id
```

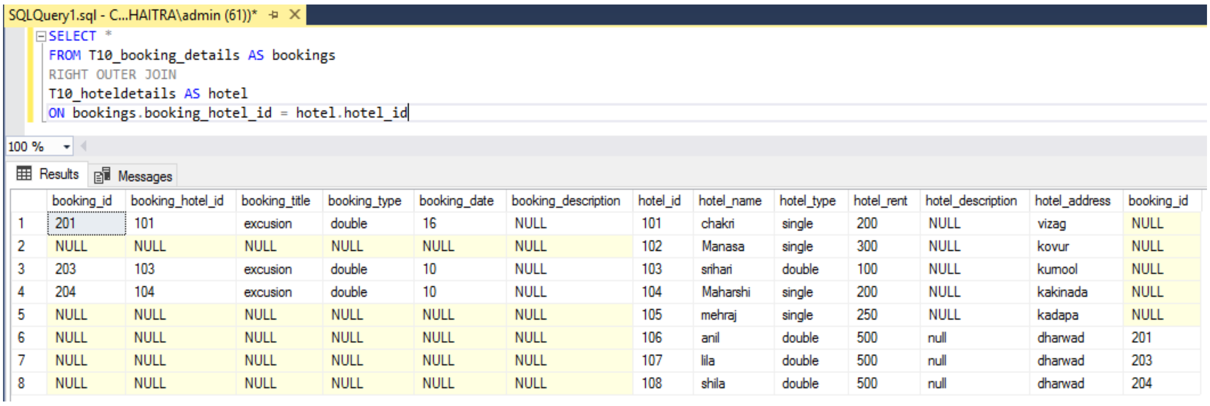
	booking_id	booking_hotel_id	booking_title	booking_type	booking_date	booking_description	customer_id	customer_name	customer_mobile	customer_email	customer_username	customer_passwor
1	101	201	excusion	single	24	NULL	NULL	NULL	NULL	NULL	NULL	NULL
2	103	203	excusion	double	10	NULL	NULL	NULL	NULL	NULL	NULL	NULL
3	104	204	excusion	single	14	NULL	NULL	NULL	NULL	NULL	NULL	NULL
4	201	101	excusion	double	16	NULL	NULL	NULL	NULL	NULL	NULL	NULL
5	203	103	excusion	double	10	NULL	103	RAGHU	23333	harsh	rishi	raghuriss
6	204	104	excusion	double	10	NULL	NULL	NULL	NULL	NULL	NULL	NULL
7	1001	2001	excursion	single	1	NULL	2001	SUNITHA	85387	suni	netsart	ufeeli
8	1002	2002	excursion	single	2	NULL	NULL	NULL	NULL	NULL	NULL	NULL
9	1003	2003	business	double	3	NULL	NULL	NULL	NULL	NULL	NULL	NULL
10	1004	2004	excursion	single	4	NULL	NULL	NULL	NULL	NULL	NULL	NULL
11	1005	2005	personal	single	5	NULL	2005	LATHA	85797	luni	etcsart	ufelli
12	1006	2006	excursion	triple	6	NULL	NULL	NULL	NULL	NULL	NULL	NULL
13	1007	2007	trip	single	7	NULL	NULL	NULL	NULL	NULL	NULL	NULL
14	1008	2008	excursion	double	8	NULL	NULL	NULL	NULL	NULL	NULL	NULL
15	1009	2009	excursion	single	9	NULL	NULL	NULL	NULL	NULL	NULL	NULL
16	1010	2010	business	triple	10	NULL	NULL	NULL	NULL	NULL	NULL	NULL
17	1011	2011	excursion	single	11	NULL	NULL	NULL	NULL	NULL	NULL	NULL
18	1012	2012	excursion	single	12	NULL	NULL	NULL	NULL	NULL	NULL	NULL
19	1013	2013	excursion	single	13	NULL	NULL	NULL	NULL	NULL	NULL	NULL
20	1014	2014	excursion	single	14	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Query executed successfully. | CHAITRA (15.0 RTM) | CHAITRA\admin (61) | T10_Travel | 00:00:00 | 25 rows

Query 1 for RIGHT OUTER JOIN :-

```
SELECT *
FROM T10_booking_details AS bookings
RIGHT OUTER JOIN
T10_hoteldetails AS hotel
ON bookings.booking_hotel_id = hotel.hotel_id
```

Output:-



SQLQuery1.sql - C...HAITRA\admin (61))*

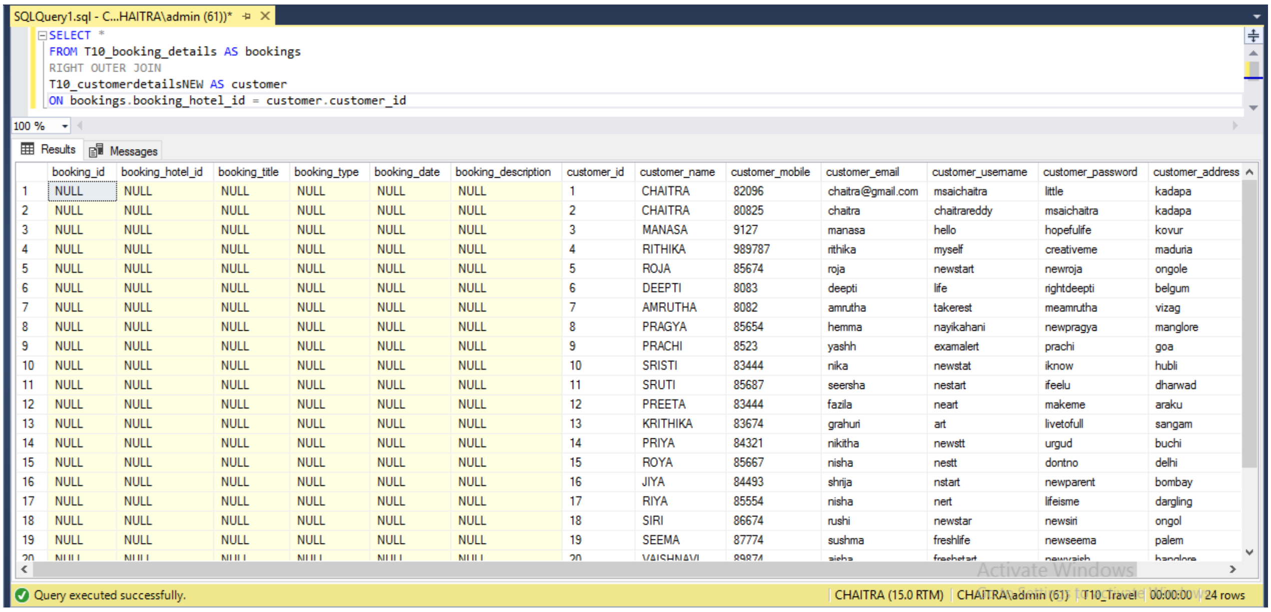
```
SELECT *
FROM T10_booking_details AS bookings
RIGHT OUTER JOIN
T10_hoteldetails AS hotel
ON bookings.booking_hotel_id = hotel.hotel_id
```

	booking_id	booking_hotel_id	booking_title	booking_type	booking_date	booking_description	hotel_id	hotel_name	hotel_type	hotel_rent	hotel_description	hotel_address	booking_id
1	201	101	excusion	double	16	NULL	101	chakri	single	200	NULL	vizag	NULL
2	NULL	NULL	NULL	NULL	NULL	NULL	102	Manasa	single	300	NULL	kovur	NULL
3	203	103	excusion	double	10	NULL	103	srihari	double	100	NULL	kurnool	NULL
4	204	104	excusion	double	10	NULL	104	Maharshi	single	200	NULL	kakinada	NULL
5	NULL	NULL	NULL	NULL	NULL	NULL	105	mehraj	single	250	NULL	kadapa	NULL
6	NULL	NULL	NULL	NULL	NULL	NULL	106	anil	double	500	null	dharwad	201
7	NULL	NULL	NULL	NULL	NULL	NULL	107	lila	double	500	null	dharwad	203
8	NULL	NULL	NULL	NULL	NULL	NULL	108	shila	double	500	null	dharwad	204

Query 2 for RIGHT OUTER JOIN :-

```
SELECT *
FROM T10_booking_details AS bookings
RIGHT OUTER JOIN
T10_customerdetailsNEW AS customer
ON bookings.booking_hotel_id = customer.customer_id
```

Output:-



SQLQuery1.sql - C...HAITRA\admin (61))*

```
SELECT *
FROM T10_booking_details AS bookings
RIGHT OUTER JOIN
T10_customerdetailsNEW AS customer
ON bookings.booking_hotel_id = customer.customer_id
```

	booking_id	booking_hotel_id	booking_title	booking_type	booking_date	booking_description	customer_id	customer_name	customer_mobile	customer_email	customer_username	customer_password	customer_address
1	NULL	NULL	NULL	NULL	NULL	NULL	1	CHAITRA	82096	chaitra@gmail.com	msaichaitra	little	kadapa
2	NULL	NULL	NULL	NULL	NULL	NULL	2	CHAITRA	80825	chaitra	chaitrareddy	msaichaitra	kadapa
3	NULL	NULL	NULL	NULL	NULL	NULL	3	MANASA	9127	manasa	hello	hopefulife	kovur
4	NULL	NULL	NULL	NULL	NULL	NULL	4	RITHIKA	989787	rithika	myself	creativeme	maduria
5	NULL	NULL	NULL	NULL	NULL	NULL	5	ROJA	85674	roja	newstart	newroja	ongole
6	NULL	NULL	NULL	NULL	NULL	NULL	6	DEEPTI	8083	deepti	life	rightdeepti	belgum
7	NULL	NULL	NULL	NULL	NULL	NULL	7	AMRUTHA	8082	amrutha	takerest	meamrutha	vizag
8	NULL	NULL	NULL	NULL	NULL	NULL	8	PRAGYA	85654	hemma	nayikahani	newpragya	manglore
9	NULL	NULL	NULL	NULL	NULL	NULL	9	PRACHI	8523	yashh	examalert	prachi	goa
10	NULL	NULL	NULL	NULL	NULL	NULL	10	SRISTI	83444	nika	newstat	iknow	hubli
11	NULL	NULL	NULL	NULL	NULL	NULL	11	SRUTI	85687	seersha	nestart	ifeelu	dharwad
12	NULL	NULL	NULL	NULL	NULL	NULL	12	PREETA	83444	fazila	neart	makeme	araku
13	NULL	NULL	NULL	NULL	NULL	NULL	13	KRITHIKA	83674	grahuri	art	livetofull	sangam
14	NULL	NULL	NULL	NULL	NULL	NULL	14	PRIYA	84321	nikitha	newstt	urgud	buchi
15	NULL	NULL	NULL	NULL	NULL	NULL	15	ROYA	85667	nisha	nestt	dontno	delhi
16	NULL	NULL	NULL	NULL	NULL	NULL	16	JIYA	84493	shrija	nstart	newparent	bombay
17	NULL	NULL	NULL	NULL	NULL	NULL	17	RIYA	85554	nisha	nert	lifeisme	dargling
18	NULL	NULL	NULL	NULL	NULL	NULL	18	SIRI	86674	rushi	newstar	newsiri	ongol
19	NULL	NULL	NULL	NULL	NULL	NULL	19	SEEMA	87774	sushma	freshlife	newseema	palem
20	NULL	NULL	NULL	NULL	NULL	NULL	20	VAISHNAVI	89874	aisha	freshstart	newvaish	banglore

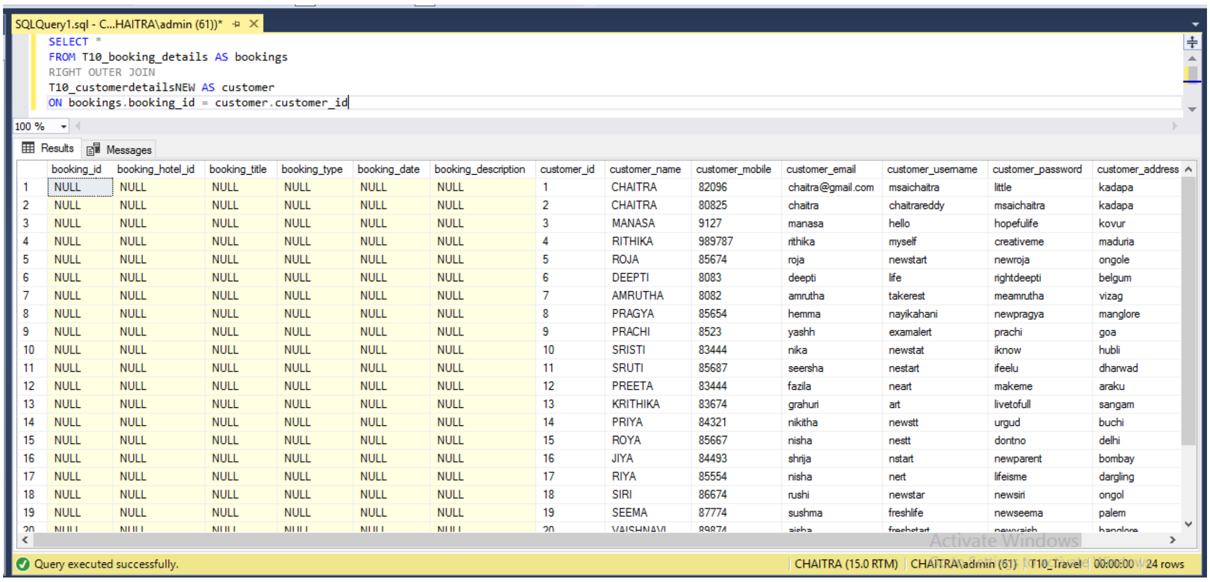
Query executed successfully.

CHAITRA (15.0 RTM) | CHAITRA\admin (61) | T10_Travel | 00:00:00 | 24 rows

Query 3 for RIGHT OUTER JOIN :-

```
SELECT *
FROM T10_booking_details AS bookings
RIGHT OUTER JOIN
T10_customerdetailsNEW AS customer
ON bookings.booking_id = customer.customer_id
```

Output:-



SQLQuery1.sql - C...HAITRA\admin (61))*

```
SELECT *
FROM T10_booking_details AS bookings
RIGHT OUTER JOIN
T10_customerdetailsNEW AS customer
ON bookings.booking_id = customer.customer_id
```

	booking_id	booking_hotel_id	booking_title	booking_type	booking_date	booking_description	customer_id	customer_name	customer_mobile	customer_email	customer_username	customer_password	customer_address
1	NULL	NULL	NULL	NULL	NULL	NULL	1	CHAITRA	82096	chaitra@gmail.com	msaichaitra	little	kadapa
2	NULL	NULL	NULL	NULL	NULL	NULL	2	CHAITRA	80825	chaitra	chaitrareddy	msaichaitra	kadapa
3	NULL	NULL	NULL	NULL	NULL	NULL	3	MANASA	9127	manasa	hello	hopefulife	kovur
4	NULL	NULL	NULL	NULL	NULL	NULL	4	RITHIKA	989787	rithika	myself	creativeme	maduria
5	NULL	NULL	NULL	NULL	NULL	NULL	5	ROJA	85674	roja	newstart	newroja	ongole
6	NULL	NULL	NULL	NULL	NULL	NULL	6	DEEPTI	8083	deepti	life	rightdeepti	belgum
7	NULL	NULL	NULL	NULL	NULL	NULL	7	AMRUTHA	8082	amrutha	takerest	meamrutha	vizag
8	NULL	NULL	NULL	NULL	NULL	NULL	8	PRAGYA	85654	hemma	nayikahani	newpragya	manglore
9	NULL	NULL	NULL	NULL	NULL	NULL	9	PRACHI	8523	yashh	examalert	prachi	goa
10	NULL	NULL	NULL	NULL	NULL	NULL	10	SRISTI	83444	nika	newstat	iknow	hubli
11	NULL	NULL	NULL	NULL	NULL	NULL	11	SRUTI	85687	seersha	nestart	ifeelu	dharwad
12	NULL	NULL	NULL	NULL	NULL	NULL	12	PREETA	83444	fazila	neart	makeme	araku
13	NULL	NULL	NULL	NULL	NULL	NULL	13	KRITHIKA	83674	grahuri	art	livetofull	sangam
14	NULL	NULL	NULL	NULL	NULL	NULL	14	PRIYA	84321	nikitha	newstt	urgud	buchi
15	NULL	NULL	NULL	NULL	NULL	NULL	15	ROYA	85667	nisha	nestt	dontno	delhi
16	NULL	NULL	NULL	NULL	NULL	NULL	16	JIYA	84493	shrija	nstart	newparent	bombay
17	NULL	NULL	NULL	NULL	NULL	NULL	17	RIYA	85554	nisha	nert	lifeisme	dargling
18	NULL	NULL	NULL	NULL	NULL	NULL	18	SIRI	86674	rushi	newstar	newsiri	ongol
19	NULL	NULL	NULL	NULL	NULL	NULL	19	SEEMA	87774	sushma	freshlife	newseema	palem
20	NULL	NULL	NULL	NULL	NULL	NULL	20	VAISHNAVI	89874	aisha	freshstart	newvaish	banglore

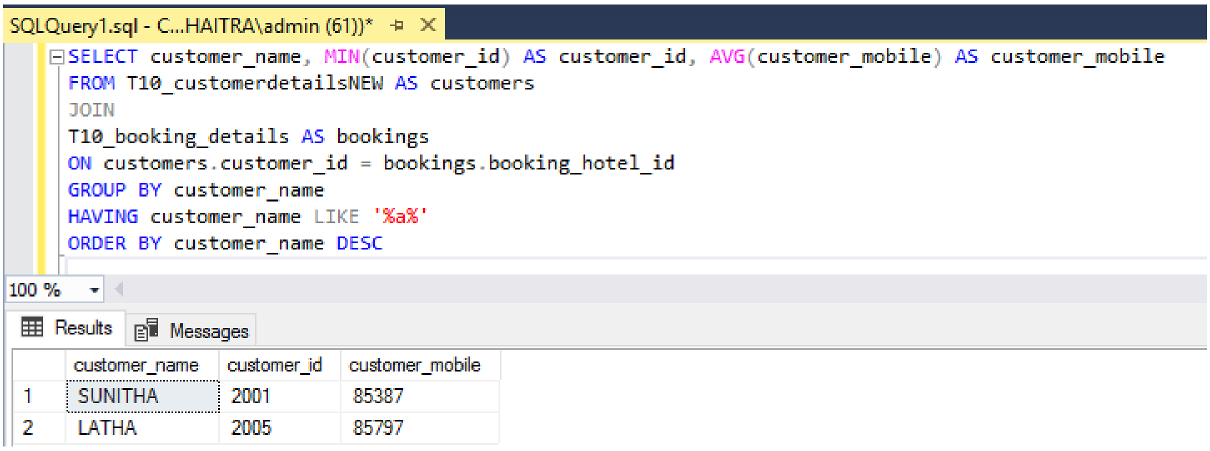
Query executed successfully. | CHAITRA (15.0 RTM) | CHAITRA\admin (61) | T10_Travel | 00:00:00 | 24 rows

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

Query:-

```
SELECT customer_name, MIN(customer_id) AS customer_id,
AVG(customer_mobile) AS customer_mobile
FROM T10_customerdetailsNEW AS customers
JOIN
T10_booking_details AS bookings
ON customers.customer_id = bookings.booking_hotel_id
GROUP BY customer_name
HAVING customer_name LIKE '%a%'
ORDER BY customer_name DESC
```

Output:-



```
SELECT customer_name, MIN(customer_id) AS customer_id, AVG(customer_mobile) AS customer_mobile
FROM T10_customerdetailsNEW AS customers
JOIN
T10_booking_details AS bookings
ON customers.customer_id = bookings.booking_hotel_id
GROUP BY customer_name
HAVING customer_name LIKE '%a%'
ORDER BY customer_name DESC
```

	customer_name	customer_id	customer_mobile
1	SUNITHA	2001	85387
2	LATHA	2005	85797