# DBMS LAB ASSIGNMENT 5 K.V.L.AMRUTHA 19BCS048

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

	☐ use T10_TRAVEL ☐ select * from T10_bookingdetails where customer_id >ANY(select customer_id from T10_bookingdetails where booking title 'single')							
					_			
0 %	•							
■ Results								
bo	ooking_id	booking_hotel_id	booking_type	booking_date	booking_title	booking_description	customer_id	
2		1000	online	20/01/2020	single	NULL	101	
3		1000	online	20/01/2020	single	NULL	102	
4		1000	offline	20/01/2020	single	NULL	103	
5		1000	offline	20/01/2020	single	NULL	104	
6		1000	online	20/01/2020	single	NULL	105	
7		1000	online	20/01/2020	single	NULL	106	
8		1000	offline	20/01/2020	single	NULL	107	
9		1000	online	20/01/2020	single	NULL	108	
1	0	1000	online	20/01/2020	single	NULL	109	
0 1	1	1000	online	20/01/2020	single	NULL	110	
1 1	2	1000	offline	20/01/2020	single	NULL	111	
2 1	3	1000	offline	20/01/2020	single	NULL	112	
3 1	4	1000	offline	20/01/2020	single	NULL	113	
4 1	5	1000	online	20/01/2020	single	NULL	115	
5 1	6	1000	online	20/01/2020	single	NULL	116	
6 1	7	1000	offline	20/01/2020	single	NULL	117	
7 1	8	1000	online	20/01/2020	single	NULL	118	
8 1	9	1000	online	20/01/2020	single	NULL	119	

use T10\_TRAVEL

 $\textcolor{red}{\textbf{select}} * \textbf{from T10\_customer details}$ 

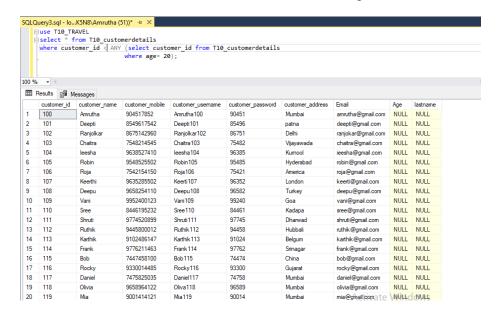
where customer\_id > ANY (select customer\_id from T10\_customerdetails where age= 20);



#### use T10\_TRAVEL

select \* from T10\_customerdetails

where customer\_id < ANY (select customer\_id from T10\_customerdetails where age= 20);

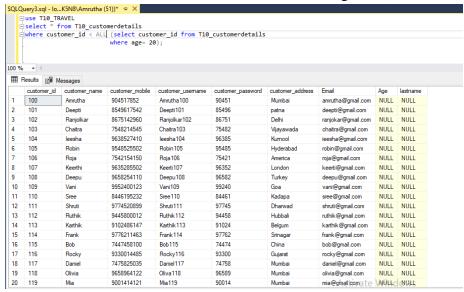


#### use T10\_TRAVEL

select \* from T10\_customerdetails

where customer\_id < ALL (select customer\_id from T10\_customerdetails

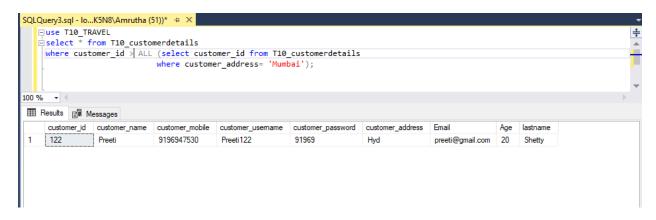
#### where age= 20);



#### use T10\_TRAVEL

select \* from T10\_customerdetails

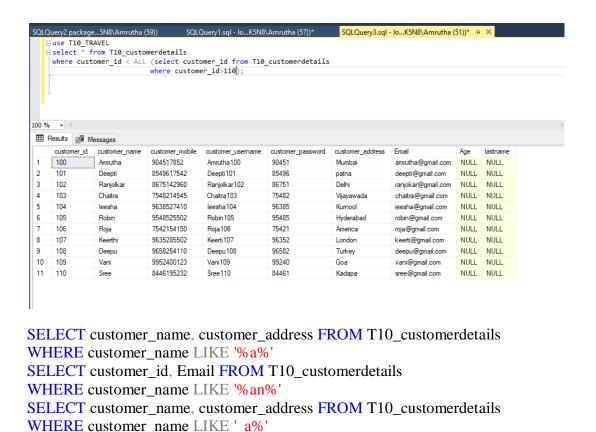
where customer\_id > ALL (select customer\_id from T10\_customerdetails where customer\_address= 'Mumbai');

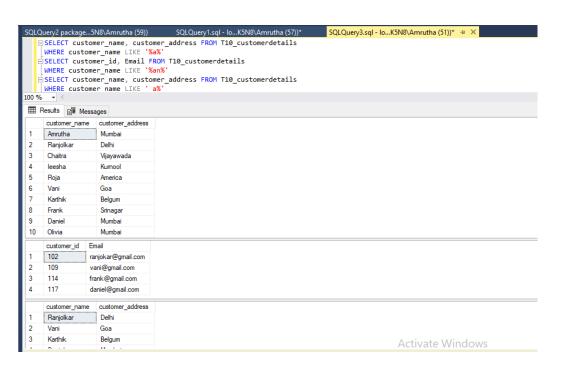


#### use T10\_TRAVEL

select \* from T10\_customerdetails

 $\label{eq:where customer_id} \begin{tabular}{ll} where customer_id < ALL (select customer_id from T10\_customerdetails \\ & where customer\_id > 110); \end{tabular}$ 





### 2. One query for each Aggregate function.

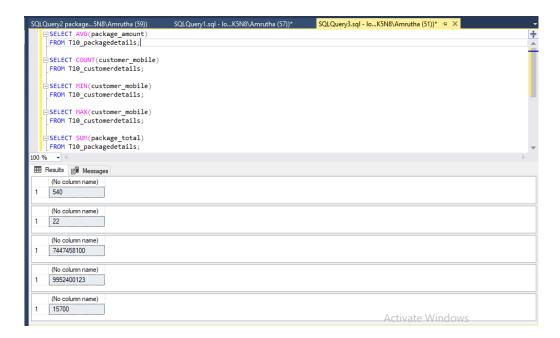
```
SELECT AVG(package_amount)
FROM T10_packagedetails;

SELECT COUNT(customer_mobile)
FROM T10_customerdetails;

SELECT MIN(customer_mobile)
FROM T10_customerdetails;

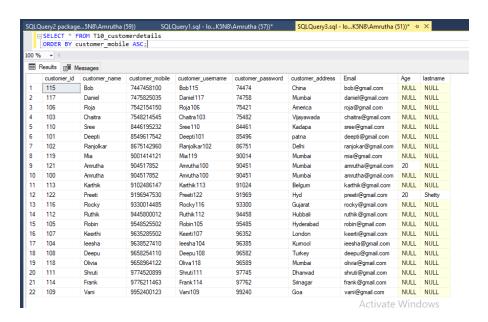
SELECT MAX(customer_mobile)
FROM T10_customerdetails;

SELECT SUM(package_total)
FROM T10_packagedetails;
```

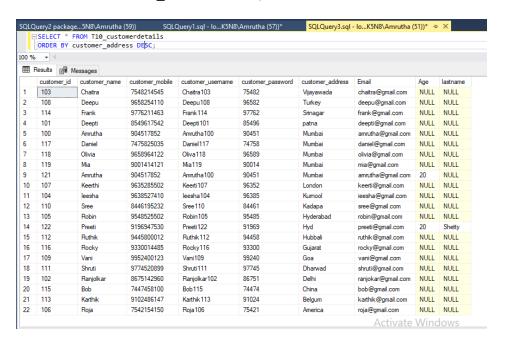


# 3. Illustrate the usage of order by, group by and having clause (2 queries for each case)

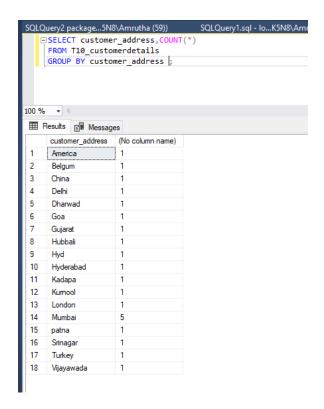
SELECT \* FROM T10\_customerdetails ORDER BY customer\_mobile ASC;



# SELECT \* FROM T10\_customerdetails ORDER BY customer address DESC;



SELECT customer\_address, COUNT(\*)
FROM T10\_customerdetails
GROUP BY customer\_address;



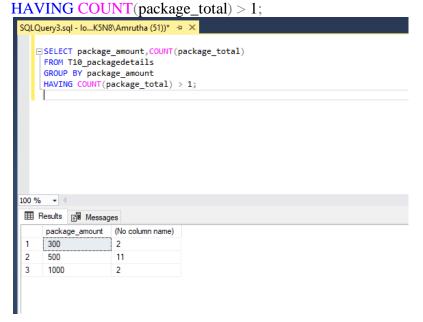
SELECT package\_amount,COUNT(\*)
FROM T10\_packagedetails
GROUP BY package\_amount;



SELECT package\_amount, COUNT(package\_amount)
FROM T10\_packagedetails
GROUP BY package\_amount
HAVING COUNT(package\_amount) > 5;

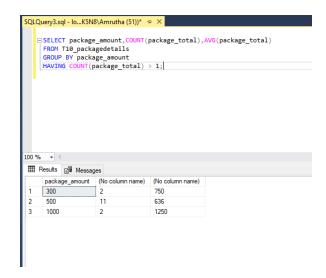


SELECT package\_amount,COUNT(package\_total)
FROM T10\_packagedetails
GROUP BY package\_amount

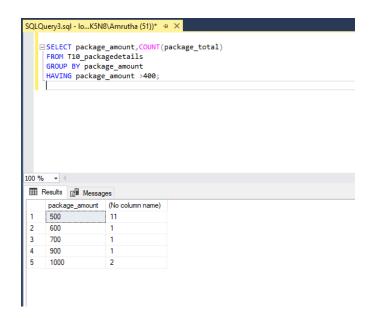


### 4. Use Aggregate function with group by and having

```
\label{eq:count_count} \begin{split} & \textbf{SELECT package\_amount,} \textbf{COUNT}(package\_total), \textbf{AVG}(package\_total) \\ & \textbf{FROM T10\_packagedetails} \\ & \textbf{GROUP BY package\_amount} \\ & \textbf{HAVING COUNT}(package\_total) > 1; \end{split}
```

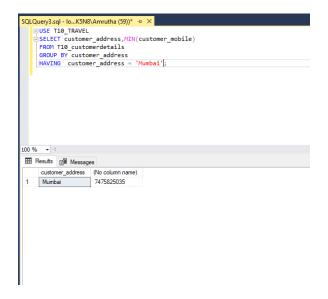


SELECT package\_amount,COUNT(package\_total)
FROM T10\_packagedetails
GROUP BY package\_amount
HAVING package\_amount >400;

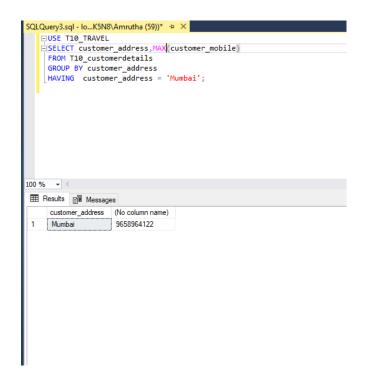


USE T10\_TRAVEL SELECT customer\_address,MIN(customer\_mobile) FROM T10\_customerdetails GROUP BY customer\_address

#### **HAVING** customer\_address = 'Mumbai';



USE T10\_TRAVEL
SELECT customer\_address,MAX(customer\_mobile)
FROM T10\_customerdetails
GROUP BY customer\_address
HAVING customer\_address = 'Mumbai';



USE T10\_TRAVEL

```
SELECT customer_address,SUM(customer_id)
FROM T10_customerdetails
GROUP BY customer_address
HAVING customer_address = 'Mumbai';
```

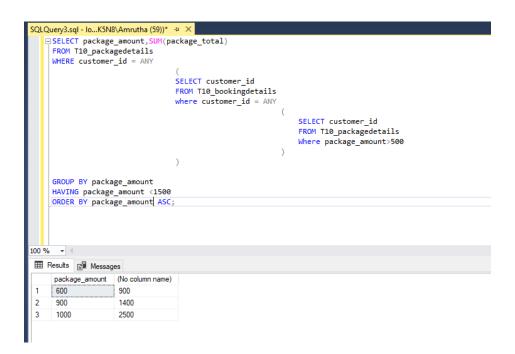
### 5. Write at least 3 nested queries using order by, group by and having clause.

```
SELECT package_amount,SUM(package_total)
FROM T10_packagedetails
WHERE customer_id = ANY

(
SELECT customer_id
FROM T10_bookingdetails
where customer_id = ANY

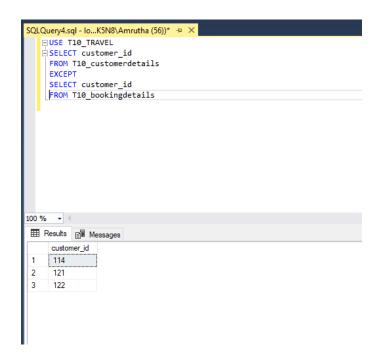
(
SELECT customer_id
FROM T10_packagedetails
Where package_amount>500
)
```

GROUP BY package\_amount HAVING package\_amount <1500 ORDER BY package\_amount ASC;



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

USE T10\_TRAVEL SELECT customer\_id FROM T10\_customerdetails EXCEPT SELECT customer\_id FROM T10\_bookingdetails



SELECT \* FROM T10\_customerdetails WHERE EXISTS (

SELECT customer\_id FROM T10\_bookingdetails

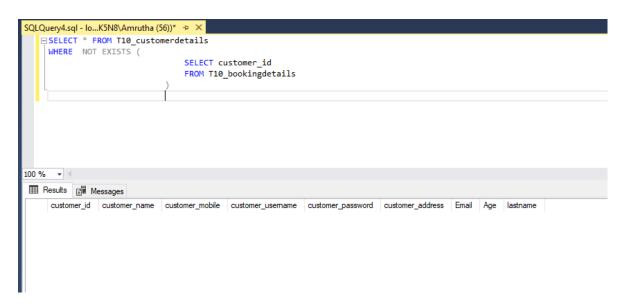
SQLQuery4.sql - Io...K5N8\Amrutha (56))\* 💠 🗙 SELECT \* FROM T10\_customerdetails WHERE EXISTS ( SELECT customer\_id FROM T10\_bookingdetails 100 % 🕶 🖪 Results Messages customer name customer mobile Email lastname customer id customer usemame customer password customer address Age 904517852 100 Amrutha Amrutha 100 90451 Mumbai amrutha@gmail.com NULL NULL 101 8549617542 Deepti101 85496 patna deepti@gmail.com NULL NULL Deepti 8675142960 Ranjolkar102 86751 Delhi raniokar@gmail.com NULL 102 Raniolkar NULL 103 Chaitra 7548214545 Chaitra 103 75482 Vijayawada chaitra@gmail.com NULL NULL 104 9638527410 leesha104 96385 NULL leesha Kumool ieesha@gmail.com NULL Hyderabad 105 Robin 9548525502 Robin 105 95485 robin@amail.com NULL NULL 106 Roja 7542154150 Roja 106 75421 America roja@gmail.com NULL NULL 8 107 Keerthi 9635285502 Keerti107 96352 NULL NULL London keerti@amail.com 9 108 Deepu 9658254110 Deepu108 96582 Turkey deepu@gmail.com NULL NULL 9952400123 Vani 109 99240 NULL NULL Vani Goa vani@gmail.com 84461 11 110 8446195232 Sree 110 Kadana sree@gmail.com NULL NULL Sree 12 111 Shruti 9774520899 Shruti111 97745 Dharwad shruti@gmail.com NULL NULL 13 Ruthik 9445800012 Ruthik 112 94458 Hubbali ruthik@gmail.com NULL NULL 112 14 113 Karthik 9102486147 Karthik 113 91024 Belgum karthik@gmail.com NULL NULL 15 114 Frank 9776211463 Frank 114 97762 frank@gmail.com NULL NULL Srinagar 7447458100 74474 16 115 Bob 115 NULL Bob China bob@gmail.com NULL 17 116 Rocky 9330014485 Rocky116 93300 Gujarat rocky@gmail.com NULL NULL 18 117 7475825035 74758 Daniel Daniel117 Mumbai daniel@gmail.com NULL NULL 19 9658964122 Oliva118 96589 NULL NULL 118 Olivia Mumbai olivia@gmail.com 20 9001414121 Mia119 90014 Mumbai mia@gmail.com NULL NULL

**SELECT** \* **FROM** T10\_customerdetails

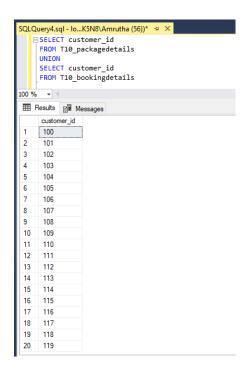
```
WHERE NOT EXISTS (
```

SELECT customer\_id FROM T10\_bookingdetails

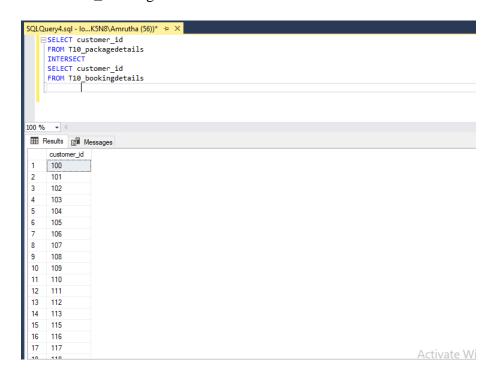
)



SELECT customer\_id FROM T10\_packagedetails UNION SELECT customer\_id FROM T10\_bookingdetails



SELECT customer\_id FROM T10\_packagedetails INTERSECT SELECT customer\_id FROM T10\_bookingdetails



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

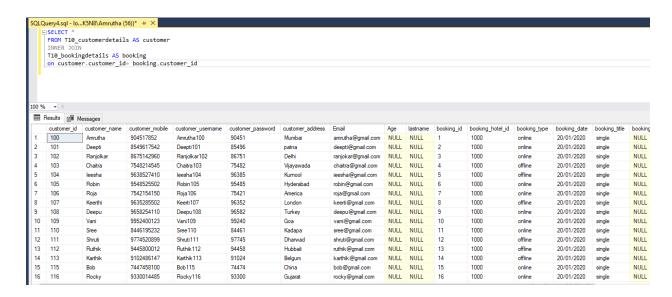
#### **SELECT** \*

#### FROM T10 customerdetails AS customer

#### **INNER JOIN**

T10\_bookingdetails AS booking

on customer\_id= booking.customer\_id



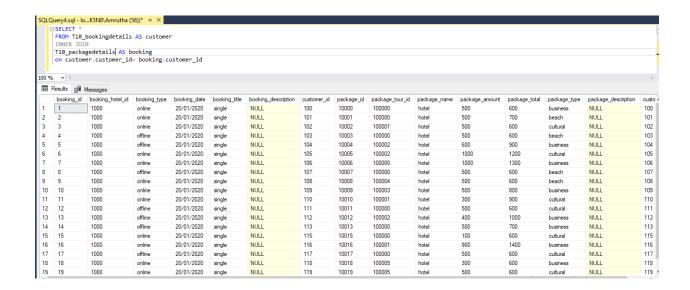
#### **SELECT** \*

#### FROM T10\_bookingdetails AS customer

**INNER JOIN** 

T10\_packagedetails AS booking

on customer\_id= booking.customer\_id



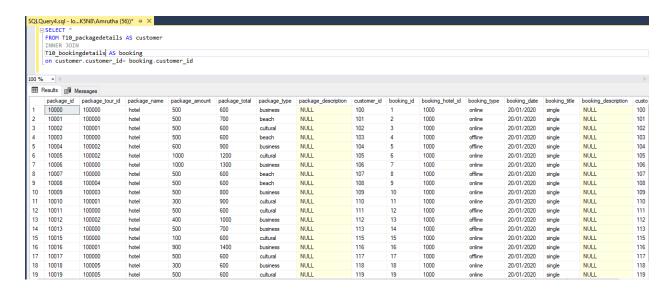
#### **SELECT** \*

## FROM T10\_packagedetails AS customer

#### **INNER JOIN**

#### T10\_bookingdetails AS booking

on customer\_id= booking.customer\_id



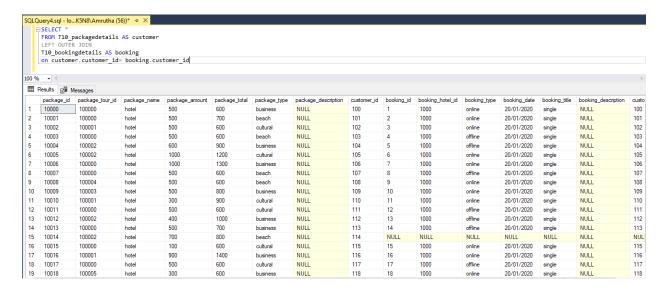
#### **SELECT** \*

FROM T10\_packagedetails AS customer

LEFT OUTER JOIN

T10\_bookingdetails AS booking

on customer\_id= booking.customer\_id



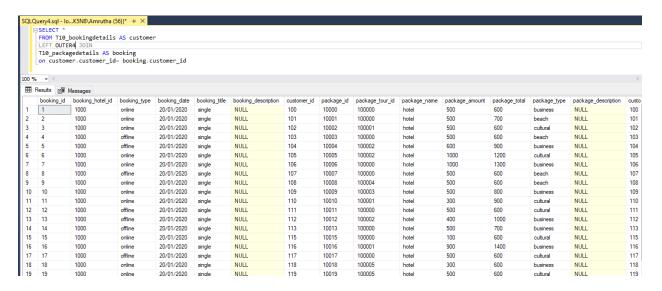
**SELECT** \*

FROM T10\_bookingdetails AS customer

#### LEFT OUTER JOIN

#### T10\_packagedetails AS booking

on customer\_id= booking.customer\_id



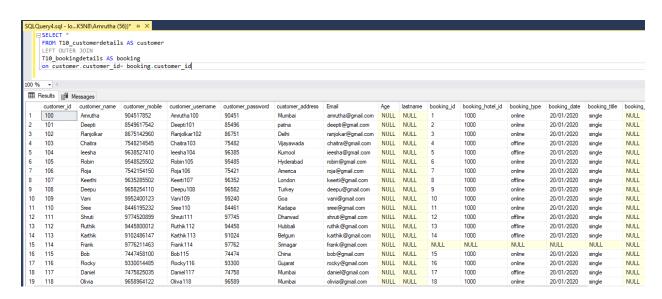
#### **SELECT** \*

FROM T10\_customerdetails AS customer

LEFT OUTER JOIN

T10\_bookingdetails AS booking

on customer customer id= booking.customer id



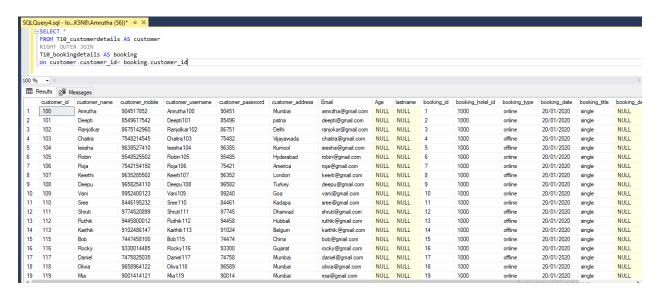
**SELECT** \*

FROM T10\_customerdetails AS customer

RIGHT OUTER JOIN

T10\_bookingdetails AS booking

#### on customer\_id= booking.customer\_id



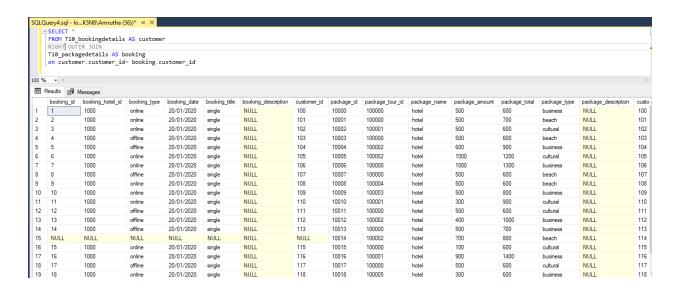
#### **SELECT** \*

FROM T10\_bookingdetails AS customer

RIGHT OUTER JOIN

T10\_packagedetails AS booking

on customer\_id= booking.customer\_id



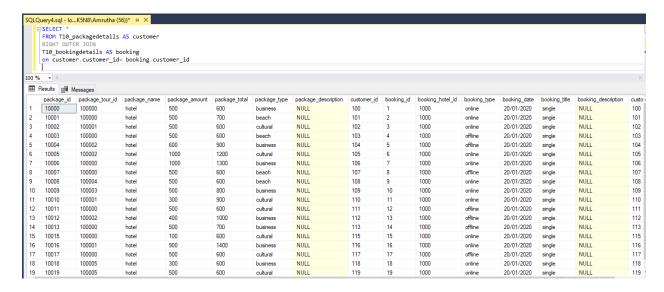
#### SELECT \*

FROM T10\_packagedetails AS customer

RIGHT OUTER JOIN

T10\_bookingdetails AS booking

on customer\_id= booking.customer\_id



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

```
use T10_TRAVEL
SELECT package_type, SUM(package_amount) AS Amount ,MIN(package_total) AS
Total_Min,AVG(package_tour_id)AS Tour_id,MAX(package_total) AS Total_Max
FROM T10_packagedetails As customer
JOIN
T10_bookingdetails AS booking
on customer.customer_id=booking.customer_id
GROUP BY package_type
HAVING package_type LIKE '__%'
ORDER BY package_type ASC;
```

