

## Assignment 2 : Retrieve data using join with where clause

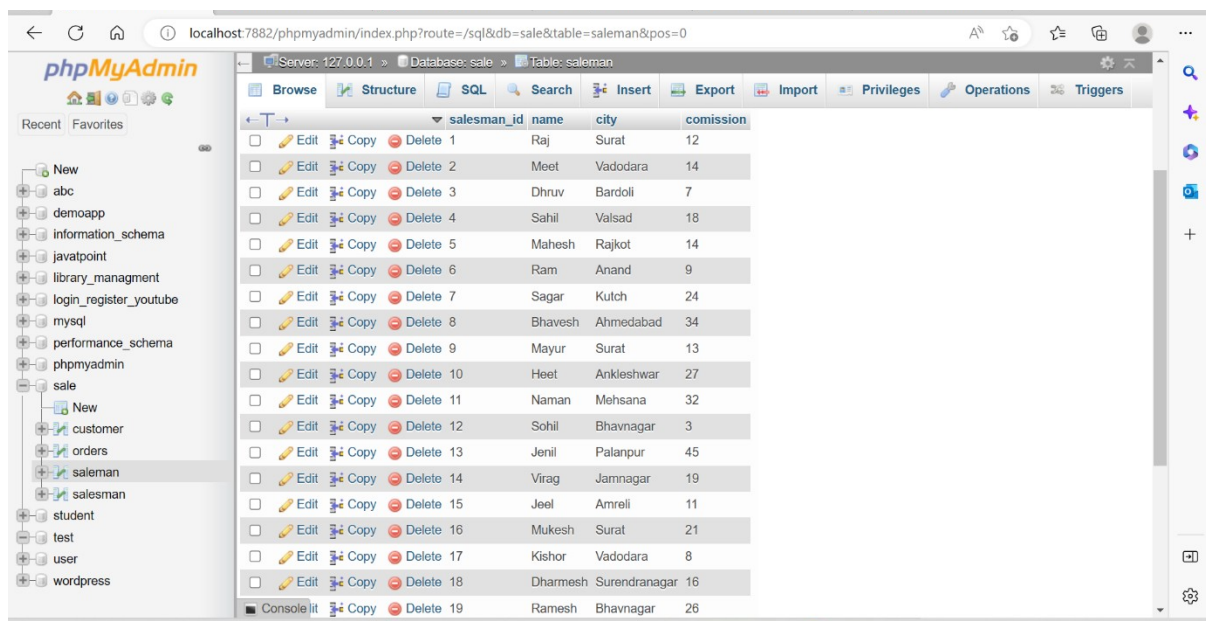
Sample table1: salesman

-salesman\_id

-name

-city

-commission



The screenshot shows the phpMyAdmin interface with the 'salesman' table selected. The table contains 19 records, each with a unique salesman\_id, name, city, and commission value. The interface includes a sidebar with a database tree, a top navigation bar with various tools like Browse, Structure, SQL, Search, Insert, Export, Import, Privileges, Operations, and Triggers, and a main area displaying the table data in a grid format. Each row has icons for Edit, Copy, and Delete actions.

salesman_id	name	city	comission
1	Raj	Surat	12
2	Meet	Vadodara	14
3	Dhruv	Bardoli	7
4	Sahil	Valsad	18
5	Mahesh	Rajkot	14
6	Ram	Anand	9
7	Sagar	Kutch	24
8	Bhavesh	Ahmedabad	34
9	Mayur	Surat	13
10	Heet	Ankleshwar	27
11	Naman	Mehsana	32
12	Sohil	Bhavnagar	3
13	Jenil	Palanpur	45
14	Virag	Jamnagar	19
15	Jeel	Amreli	11
16	Mukesh	Surat	21
17	Kishor	Vadodara	8
18	Dharmesh	Surendranagar	16
19	Ramesh	Bhavnagar	26

Sample table2: customer

-customer\_id

-cust\_name

-city -grade

-salesman\_id

localhost:7882/phpmyadmin/index.php?route=/sql&db=sale&table=customer&pos=0

Server: 127.0.0.1 > Database: sale > Table: customer

	customer_id	cust_name	city	grade	salesman_id
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	10	Ramesh	Surat	A	9
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	11	Mahesh	Valsad	A	19
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	12	Mahesh	Bardoli	B	12
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	13	Nand	Rajkot	D	15
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	14	Vibhav	Bhavnagar	B	3
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	15	Virah	Gandhinagar	B	4
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	16	Hamid	Valsad	C	20
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	17	Amrut	Mehsana	D	5
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	18	Manav	Junagadh	C	10
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	19	Krish	Palanpur	D	13
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	20	Rahul	Ahmedabad	A	7
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	21	Neel	Surat	D	2
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	22	Jayesh	Gandhinagar	B	18
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	23	Heet	Anand	D	14
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	24	Kishor	Junagadh	B	16
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	25	Raj	Sachin	C	6
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	26	Vibhav	Bhavnagar	C	11
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	27	Jatin	Bhuj	D	10
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	28	Bipin	Palitana	B	1

Sample table3: orders

- ord\_no
- purch\_amt
- ord\_date
- customer\_id
- salesman\_id

localhost:7882/phpmyadmin/index.php?route=/sql&server=1&db=sale&table=orders&pos=0

Server: 127.0.0.1 > Database: sale > Table: orders

	ord_no	purch_amt	ord_date	custmor_id	salesman_id
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	51	2000	2023-01-01	22	8
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	52	1300	2023-01-06	12	18
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	53	1000	2022-12-29	16	3
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	54	3000	2022-11-09	23	15
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	55	4000	2022-12-08	27	17
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	56	1200	2023-01-18	19	12
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	57	2300	2023-01-24	17	1
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	58	3200	2023-01-08	14	9
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	59	4500	2023-01-10	21	16
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	60	1800	2023-02-02	13	2
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	61	2100	2023-01-19	26	14
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	62	3300	2022-10-12	10	20
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	63	6500	2022-11-26	25	6
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	64	900	2022-11-30	20	13
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	65	2400	2022-09-14	28	7
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	66	4500	2023-02-09	15	4
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	67	2400	2023-01-10	18	11
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	68	2800	2023-01-17	24	5
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	69	2300	2022-09-21	11	19

1. write a SQL query to find the salesperson and customer who reside in the same city.  
Return Salesman, cust\_name and city

```
SELECT salesman.name, customer.cust_name, customer.city FROM salesman, customer
WHERE salesman.city=customer.city;
```

The screenshot shows the phpMyAdmin interface for a database named 'sale'. The left sidebar shows the database structure with tables: customer, orders, salesman, and student. The main panel shows the 'sale' database structure with a table named 'salesman' and its columns: city (varchar), commission (int), name (varchar), and salesman\_id (PRI, int). Below the structure, a table of data is displayed with columns: name, cust\_name, and city.

name	cust_name	city
Raj	Ramesh	Surat
Mayur	Ramesh	Surat
Mukesh	Ramesh	Surat
Sahil	Mahesh	Valsad
Dhruv	Mahesh	Bardoli
Mahesh	Nand	Rajkot
Sohil	Vibhav	Bhavnagar
Ramesh	Vibhav	Bhavnagar
Mansukh	Virah	Gandhinagar
Sahil	Hamid	Valsad
Naman	Amrut	Mehsana
Jenil	Krish	Palanpur
Bhaves	Rahul	Ahmedabad
Raj	Neel	Surat
Mayur	Neel	Surat
Mukesh	Neel	Surat
Mansukh	Jayesh	Gandhinagar
Ram	Heet	Anand
Sohil	Vibhav	Bhavnagar
Ramesh	Vibhav	Bhavnagar
Sohil	Mitesh	Bhavnagar
Ramesh	Mitesh	Bhavnagar

2. write a SQL query to find those orders where the order amount exists between 500 and 2000. Return ord\_no, purch\_amt, cust\_name, city

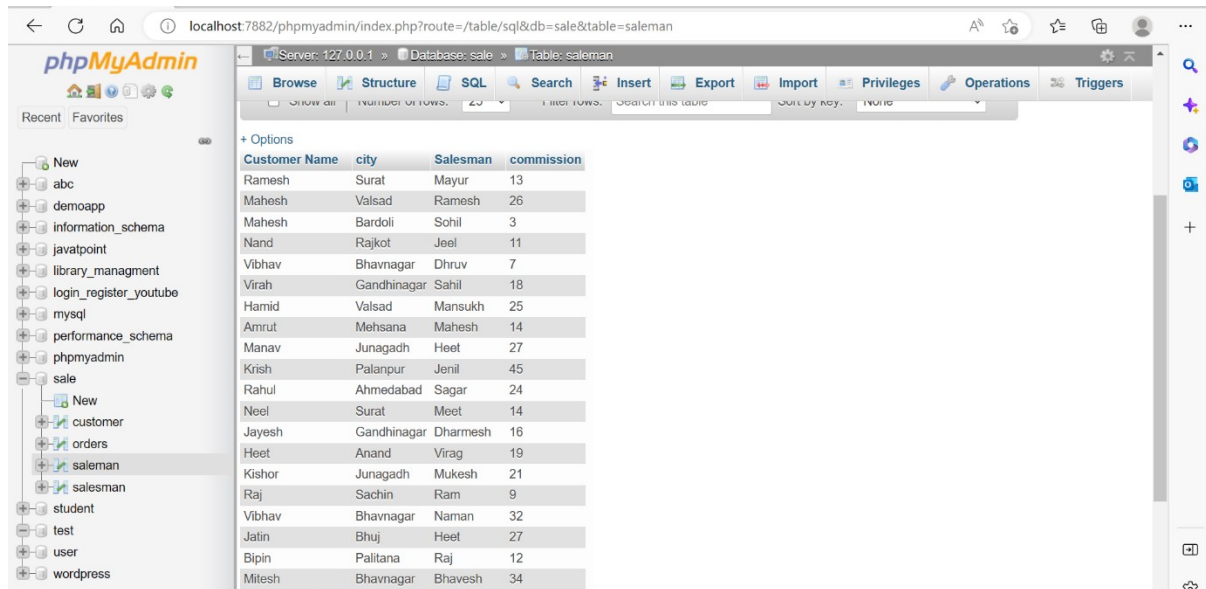
```
SELECT o.ord_no, o.purch_amt, c.cust_name, c.city FROM orders o, customer c
WHERE o.customer_id=c.customer_id AND o.purch_amt BETWEEN 500 AND 2000;
```

The screenshot shows the phpMyAdmin interface for a database named 'sale'. The left sidebar shows the database structure with tables: customer, orders, salesman, and student. The main panel shows the 'orders' table structure with columns: ord\_no (int), purch\_amt (int), customer\_id (int), and city (varchar). Below the structure, a table of data is displayed with columns: ord\_no, purch\_amt, cust\_name, and city.

ord_no	purch_amt	cust_name	city
51	2000	Jayesh	Gandhinagar
52	1300	Mahesh	Bardoli
53	1000	Hamid	Valsad
56	1200	Krish	Palanpur
60	1800	Nand	Rajkot
64	900	Rahul	Ahmedabad
70	500	Mitesh	Bhavnagar

3. write a SQL query to find the salesperson(s) and the customer(s) he represents. Return Customer Name, city, Salesman, commission

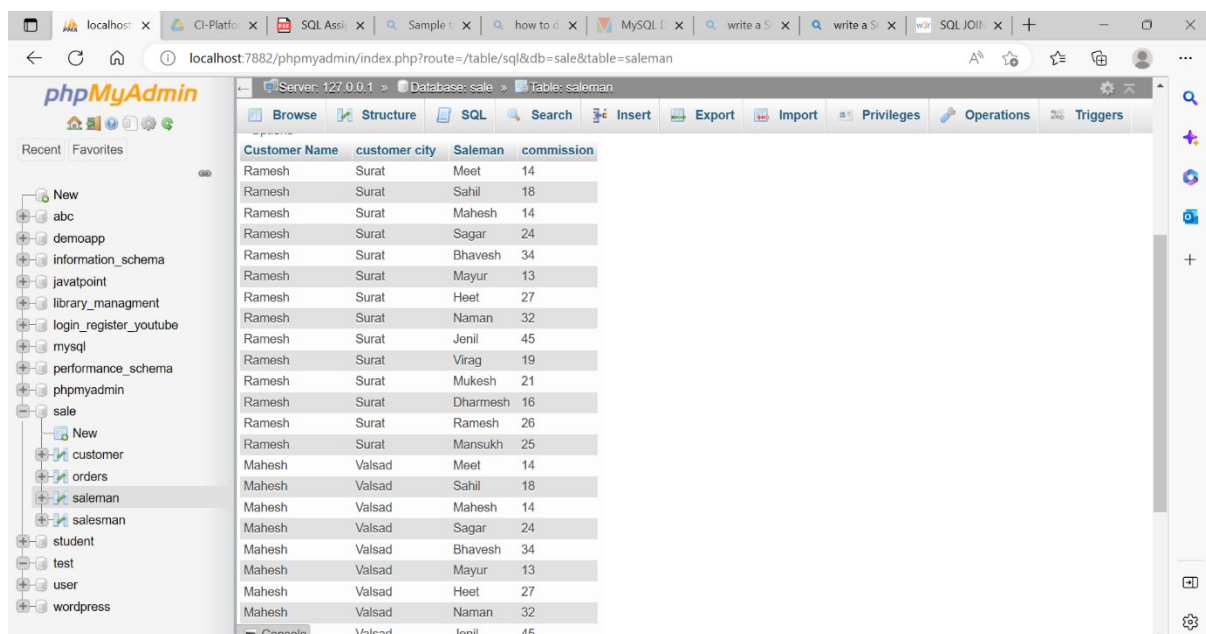
```
SELECT c.cust_name AS "Customer Name", c.city, s.name AS "Salesman", s.commission FROM customer c INNER JOIN salesman s ON c.salesman_id=s.salesman_id;
```



Customer Name	city	Salesman	commission
Ramesh	Surat	Mayur	13
Maresh	Valsad	Ramesh	26
Maresh	Bardoli	Sohil	3
Nand	Rajkot	Jeel	11
Vibhav	Bhavnagar	Dhruv	7
Virah	Gandhinagar	Sahil	18
Hamid	Valsad	Mansukh	25
Amrut	Mehsana	Maresh	14
Manav	Junagadh	Heet	27
Krish	Palanpur	Jenil	45
Rahul	Ahmedabad	Sagar	24
Neel	Surat	Meet	14
Jayesh	Gandhinagar	Dharmesh	16
Heet	Anand	Virag	19
Kishor	Junagadh	Mukesh	21
Raj	Sachin	Ram	9
Vibhav	Bhavnagar	Naman	32
Jatin	Bhuj	Heet	27
Bipin	Palitana	Raj	12
Mitesh	Bhavnagar	Bhaves	34

4. write a SQL query to find salespeople who received commissions of more than 12 percent from the company. Return Customer Name, customer city, Salesman, commission.

```
select c.cust_name as 'Customer Name', c.city as 'customer city', s.name as 'Saleman', s.commission FROM customer c,saleman s WHERE s.commission > 12;
```



Customer Name	customer city	Saleman	commission
Ramesh	Surat	Meet	14
Ramesh	Surat	Sahil	18
Ramesh	Surat	Maresh	14
Ramesh	Surat	Sagar	24
Ramesh	Surat	Bhaves	34
Ramesh	Surat	Mayur	13
Ramesh	Surat	Heet	27
Ramesh	Surat	Naman	32
Ramesh	Surat	Jenil	45
Ramesh	Surat	Virag	19
Ramesh	Surat	Mukesh	21
Ramesh	Surat	Dharmesh	16
Ramesh	Surat	Ramesh	26
Ramesh	Surat	Mansukh	25
Maresh	Valsad	Meet	14
Maresh	Valsad	Sahil	18
Maresh	Valsad	Maresh	14
Maresh	Valsad	Sagar	24
Maresh	Valsad	Bhaves	34
Maresh	Valsad	Mayur	13
Maresh	Valsad	Heet	27
Maresh	Valsad	Naman	32
Maresh	Valsad	Jenil	45



5. write a SQL query to locate those salespeople who do not live in the same city where their customers live and have received a commission of more than 12% from the company. Return Customer Name, customer city, Salesman, salesman city, commission

```
SELECT c.cust_name AS "Customer Name", c.city, s.name AS "Salesman", s.city, s.commission FROM customer c INNER JOIN salesman s ON c.salesman_id=s.salesman_id WHERE s.commission>.12 AND c.city<>s.city;
```

Customer Name	city	Salesman	city	commission
Maresh	Valsad	Ramesh	Bhavnagar	26
Maresh	Bardoli	Sohil	Bhavnagar	3
Nand	Rajkot	Jeel	Amreli	11
Vibhav	Bhavnagar	Dhruv	Bardoli	7
Virah	Gandhinagar	Sahil	Valsad	18
Hamid	Valsad	Mansukh	Gandhinagar	25
Amrut	Mehsana	Maresh	Rajkot	14
Manav	Junagadh	Heet	Ankleshwar	27
Rahul	Ahmedabad	Sagar	Kutch	24
Neel	Surat	Meet	Vadodara	14
Jayesh	Gandhinagar	Dharmesh	Surendranagar	16
Heet	Anand	Virag	Jamnagar	19
Kishor	Junagadh	Mukesh	Surat	21
Raj	Sachin	Ram	Anand	9
Vibhav	Bhavnagar	Naman	Mehsana	32
Jatin	Bhuj	Heet	Ankleshwar	27
Bipin	Palitana	Raj	Surat	12
Mitesh	Bhavnagar	Bhaves	Ahmedabad	34

6. write a SQL query to find the details of an order. Return ord\_no, ord\_date, purch\_amt, Customer Name, grade, Salesman, commission

```
SELECT o.ord_no, o.ord_date, o.purch_amt, c.cust_name AS "Customer Name", c.grade, s.name AS "Salesman", s.commission FROM orders o INNER JOIN customer c ON o.customer_id=c.customer_id INNER JOIN salesman s ON o.salesman_id=s.salesman_id;
```

ord_no	ord_date	purch_amt	Customer Name	grade	Salesman	commission
51	2023-01-01	2000	Jayesh	B	Bhaves	34
52	2023-01-06	1300	Maresh	B	Dharmesh	16
53	2022-12-29	1000	Hamid	C	Dhruv	7
54	2022-11-09	3000	Heet	D	Jeel	11
55	2022-12-08	4000	Jatin	D	Kishor	8
56	2023-01-18	1200	Krish	D	Sohil	3
57	2023-01-24	2300	Amrut	D	Raj	12
58	2023-01-08	3200	Vibhav	B	Mayur	13
59	2023-01-10	4500	Neel	D	Mukesh	21
60	2023-02-02	1800	Nand	D	Meet	14
61	2023-01-19	2100	Vibhav	C	Virag	19
62	2022-10-12	3300	Ramesh	A	Mansukh	25
63	2022-11-26	6500	Raj	C	Ram	9
64	2022-11-30	900	Rahul	A	Jenil	45
65	2022-09-14	2400	Bipin	B	Sagar	24
66	2023-02-09	4500	Virah	B	Sahil	18
67	2023-01-10	2400	Manav	C	Naman	32
68	2023-01-17	2800	Kishor	B	Maresh	14
69	2022-09-21	2300	Maresh	A	Ramesh	26
70	2023-01-25	500	Mitesh	B	Heet	27

7. Write a SQL statement to join the tables salesman, customer and orders so that the same column of each table appears once and only the relational rows are returned.

```
SELECT * FROM orders NATURAL JOIN customer NATURAL JOIN salesman;
```

The screenshot shows the phpMyAdmin interface with the 'orders' table selected. The SQL query 'SELECT \* FROM orders NATURAL JOIN customer NATURAL JOIN salesman;' has been executed. The message states: 'MySQL returned an empty result set (i.e. zero rows). (Query took 0.0006 seconds.)'. The table structure for 'orders' is visible below the message, showing columns: salesman\_id, city, customer\_id, ord\_no, purch\_amt, ord\_date, cust\_name, grade, name, and commission.

8. write a SQL query to display the customer name, customer city, grade, salesman, salesman city. The results should be sorted by ascending customer\_id.

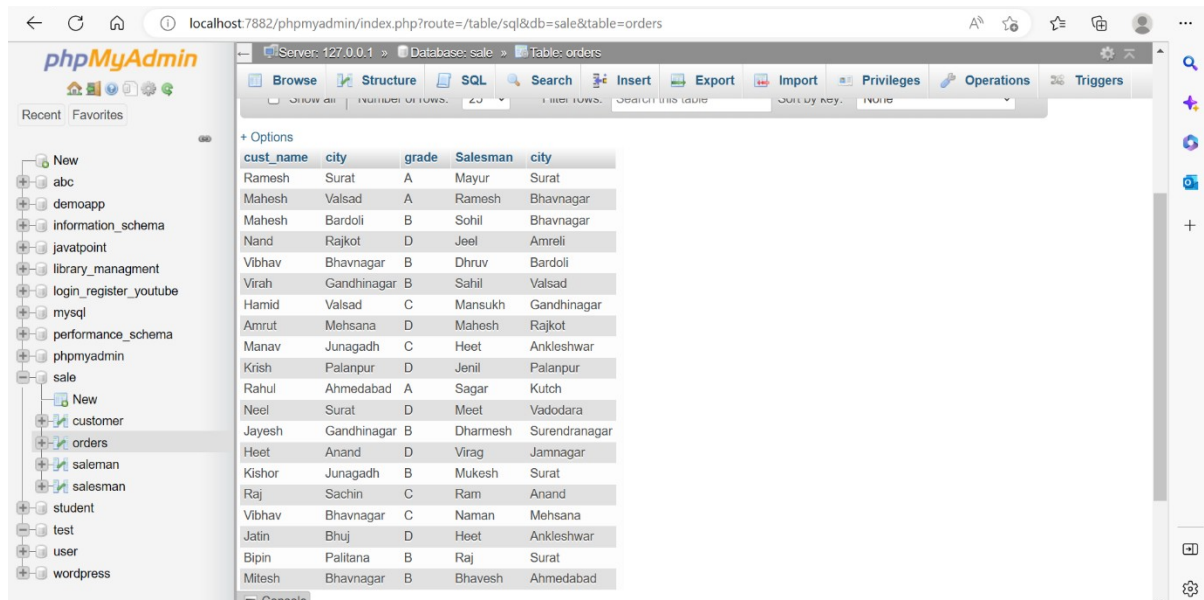
```
SELECT cust_name, city, grade FROM customer ORDER BY customer_id;
```

The screenshot shows the phpMyAdmin interface with the 'customer' table selected. The SQL query 'SELECT cust\_name, city, grade FROM customer ORDER BY customer\_id;' has been executed. The results are displayed in a table with columns: cust\_name, city, and grade. The results are sorted by customer\_id in ascending order.

cust_name	city	grade
Ramesh	Surat	A
Mahesh	Valsad	A
Mahesh	Bardoli	B
Nand	Rajkot	D
Vibhav	Bhavnagar	B
Virah	Gandhinagar	B
Hamid	Valsad	C
Amrut	Mehsana	D
Manav	Junagadh	C
Krish	Palanpur	D
Rahul	Ahmedabad	A
Neel	Surat	D
Jayesh	Gandhinagar	B
Heet	Anand	D
Kishor	Junagadh	B
Raj	Sachin	C
Vibhav	Bhavnagar	C
Jatin	Bhuj	D
Riniv	Palitana	R

9. write a SQL query to find those customers with a grade less than 300. Return cust\_name, customer city, grade, Salesman, salesmancity. The result should be ordered by ascending customer\_id.

```
SELECT c.cust_name,c.city,c.grade, s.name AS "Salesman", s.city FROM customer c LEFT OUTER JOIN salesman s ON c.salesman_id=s.salesman_id ORDER BY c.customer_id;
```

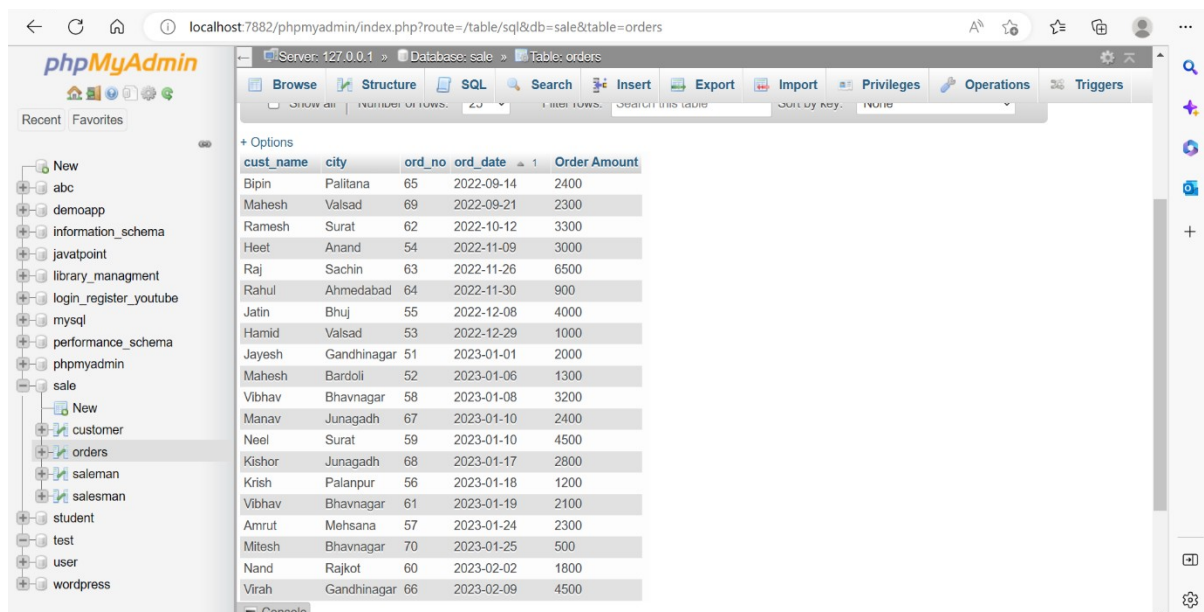


The screenshot shows the phpMyAdmin interface for a database named 'sale'. The 'orders' table is selected, and its structure is displayed. The table has 5 columns: cust\_name, city, grade, Salesman, and city. The data is as follows:

cust_name	city	grade	Salesman	city
Ramesh	Surat	A	Mayur	Surat
Mahesh	Valsad	A	Ramesh	Bhavnagar
Mahesh	Bardoli	B	Sohil	Bhavnagar
Nand	Rajkot	D	Jeel	Amreli
Vibhav	Bhavnagar	B	Dhruv	Bardoli
Virah	Gandhinagar	B	Sahil	Valsad
Hamid	Valsad	C	Mansukh	Gandhinagar
Amrut	Mehsana	D	Mahesh	Rajkot
Manav	Junagadh	C	Heet	Ankleshwar
Krish	Palanpur	D	Jenil	Palanpur
Rahul	Ahmedabad	A	Sagar	Kutch
Neel	Surat	D	Meet	Vadodara
Jayesh	Gandhinagar	B	Dharmesh	Surendranagar
Heet	Anand	D	Virag	Jamnagar
Kishor	Junagadh	B	Mukesh	Surat
Raj	Sachin	C	Ram	Anand
Vibhav	Bhavnagar	C	Naman	Mehsana
Jatin	Bhuj	D	Heet	Ankleshwar
Bipin	Palitana	B	Raj	Surat
Mitesh	Bhavnagar	B	Bhaves	Ahmedabad

10. Write a SQL statement to make a report with customer name, city, order number, order date, and order amount in ascending order according to the order date to determine whether any of the existing customers have placed an order or not

```
SELECT c.cust_name,c.city, o.ord_no, o.ord_date,o.purch_amt AS "Order Amount" FROM customer c LEFT OUTER JOIN orders o ON c.customer_id=o.customer_id order by o.ord_date;
```



The screenshot shows the phpMyAdmin interface for a database named 'sale'. The 'orders' table is selected, and its structure is displayed. The table has 5 columns: cust\_name, city, ord\_no, ord\_date, and Order Amount. The data is as follows:

cust_name	city	ord_no	ord_date	Order Amount
Bipin	Palitana	65	2022-09-14	2400
Mahesh	Valsad	69	2022-09-21	2300
Ramesh	Surat	62	2022-10-12	3300
Heet	Anand	54	2022-11-09	3000
Raj	Sachin	63	2022-11-26	6500
Rahul	Ahmedabad	64	2022-11-30	900
Jatin	Bhuj	55	2022-12-08	4000
Hamid	Valsad	53	2022-12-29	1000
Jayesh	Gandhinagar	51	2023-01-01	2000
Mahesh	Bardoli	52	2023-01-06	1300
Vibhav	Bhavnagar	58	2023-01-08	3200
Manav	Junagadh	67	2023-01-10	2400
Neel	Surat	59	2023-01-10	4500
Kishor	Junagadh	68	2023-01-17	2800
Krish	Palanpur	56	2023-01-18	1200
Vibhav	Bhavnagar	61	2023-01-19	2100
Amrut	Mehsana	57	2023-01-24	2300
Mitesh	Bhavnagar	70	2023-01-25	500
Nand	Rajkot	60	2023-02-02	1800
Virah	Gandhinagar	66	2023-02-09	4500

11. Write a SQL statement to generate a report with customer name, city, order number, order date, order amount, salesperson name, and commission to determine if any of the existing customers have not placed orders or if they have placed orders through their salesman or by themselves

```
SELECT c.cust_name,c.city, o.ord_no, o.ord_date,o.purch_amt AS "Order Amount", s.name,s.commission FROM customer c LEFT OUTER JOIN orders o ON c.customer_id=o.customer_id LEFT OUTER JOIN saleman s ON s.salesman_id=o.saleman_id;
```

cust_name	city	ord_no	ord_date	Order Amount	name	commission
Ramesh	Surat	62	2022-10-12	3300	Mansukh	25
Mahesh	Valsad	69	2022-09-21	2300	Ramesh	26
Mahesh	Bardoli	52	2023-01-06	1300	Dhamesh	16
Nand	Rajkot	60	2023-02-02	1800	Meet	14
Vibhav	Bhavnagar	58	2023-01-08	3200	Mayur	13
Virah	Gandhinagar	66	2023-02-09	4500	Sahil	18
Hamid	Valsad	53	2022-12-29	1000	Dhruv	7
Amrut	Mehsana	57	2023-01-24	2300	Raj	12
Manav	Junagadh	67	2023-01-10	2400	Naman	32
Krish	Palanpur	56	2023-01-18	1200	Sohil	3
Rahul	Ahmedabad	64	2022-11-30	900	Jenil	45
Neel	Surat	59	2023-01-10	4500	Mukesh	21
Jayesh	Gandhinagar	51	2023-01-01	2000	Bhaves	34
Heet	Anand	54	2022-11-09	3000	Jeel	11
Kishor	Junagadh	68	2023-01-17	2800	Mahesh	14
Raj	Sachin	63	2022-11-26	6500	Ram	9
Vibhav	Bhavnagar	61	2023-01-19	2100	Virag	19
Jatin	Bhuj	55	2022-12-08	4000	Kishor	8
Bipin	Palitana	65	2022-09-14	2400	Sagar	24
Mitesh	Bhavnagar	70	2023-01-25	500	Heet	27

12. Write a SQL statement to generate a list in ascending order of salespersons who work either for one or more customers or have not yet joined any of the customers

```
SELECT c.cust_name,c.city,c.grade, s.name AS "Salesman", s.city FROM customer c RIGHT OUTER JOIN saleman s ON s.salesman_id=c.salesman_id ORDER BY s.salesman_id;
```

cust_name	city	grade	Salesman	city
Bipin	Palitana	B	Raj	Surat
Neel	Surat	D	Meet	Vadodara
Vibhav	Bhavnagar	B	Dhruv	Bardoli
Virah	Gandhinagar	B	Sahil	Valsad
Amrut	Mehsana	D	Mahesh	Rajkot
Raj	Sachin	C	Ram	Anand
Rahul	Ahmedabad	A	Sagar	Kutch
Mitesh	Bhavnagar	B	Bhaves	Ahmedabad
Ramesh	Surat	A	Mayur	Surat
Manav	Junagadh	C	Heet	Ankleshwar
Jatin	Bhuj	D	Heet	Ankleshwar
Vibhav	Bhavnagar	C	Naman	Mehsana
Mahesh	Bardoli	B	Sohil	Bhavnagar
Krish	Palanpur	D	Jenil	Palanpur
Heet	Anand	D	Virag	Jamnagar
Nand	Rajkot	D	Jeel	Amreli
Kishor	Junagadh	B	Mukesh	Surat
NULL	NULL	NULL	Kishor	Vadodara
Jayesh	Gandhinagar	B	Dhamesh	Surendranagar
Mahesh	Valsad	A	Ramesh	Bhavnagar
Hamid	Valsad	C	Mansukh	Gandhinagar



13. write a SQL query to list all salespersons along with customer name, city, grade, order number, date, and amount.

```
SELECT c.cust_name, c.city, c.grade, s.name AS "Salesman", o.ord_no, o.ord_date, o.purch_amt FROM customer c RIGHT OUTER JOIN salesman s ON s.salesman_id=c.salesman_id RIGHT OUTER JOIN orders o ON o.customer_id=c.customer_id;
```

cust_name	city	grade	Salesman	ord_no	ord_date	purch_amt
Jayesh	Gandhinagar	B	Dharmesh	51	2023-01-01	2000
Mahesh	Bardoli	B	Sohil	52	2023-01-06	1300
Hamid	Valsad	C	Mansukh	53	2022-12-29	1000
Heet	Anand	D	Virag	54	2022-11-09	3000
Jatin	Bhuj	D	Heet	55	2022-12-08	4000
Krish	Palanpur	D	Jenil	56	2023-01-18	1200
Amrut	Mehsana	D	Mahesh	57	2023-01-24	2300
Vibhav	Bhavnagar	B	Dhruv	58	2023-01-08	3200
Neel	Surat	D	Meet	59	2023-01-10	4500
Nand	Rajkot	D	Jeel	60	2023-02-02	1800
Vibhav	Bhavnagar	C	Naman	61	2023-01-19	2100
Ramesh	Surat	A	Mayur	62	2022-10-12	3300
Raj	Sachin	C	Ram	63	2022-11-26	6500
Rahul	Ahmedabad	A	Sagar	64	2022-11-30	900
Bipin	Palitana	B	Raj	65	2022-09-14	2400
Virah	Gandhinagar	B	Sahil	66	2023-02-09	4500
Manav	Junagadh	C	Heet	67	2023-01-10	2400
Kishor	Junagadh	B	Mukesh	68	2023-01-17	2800
Mahesh	Valsad	A	Ramesh	69	2022-09-21	2300
Mitesh	Bhavnagar	B	Bhaves	70	2023-01-25	500

14. Write a SQL statement to make a list for the salesmen who either work for one or more customers or yet to join any of the customers. The customer may have placed, either one or more orders on or above order amount 2000 and must have a grade, or he may not have placed any order to the associated supplier.

```
SELECT s.name AS "Salesman" FROM salesman s LEFT OUTER JOIN customer c ON s.salesman_id=c.salesman_id LEFT OUTER JOIN orders o ON c.customer_id=o.customer_id WHERE o.purch_amt >= 2000 AND grade IS NOT NULL;
```

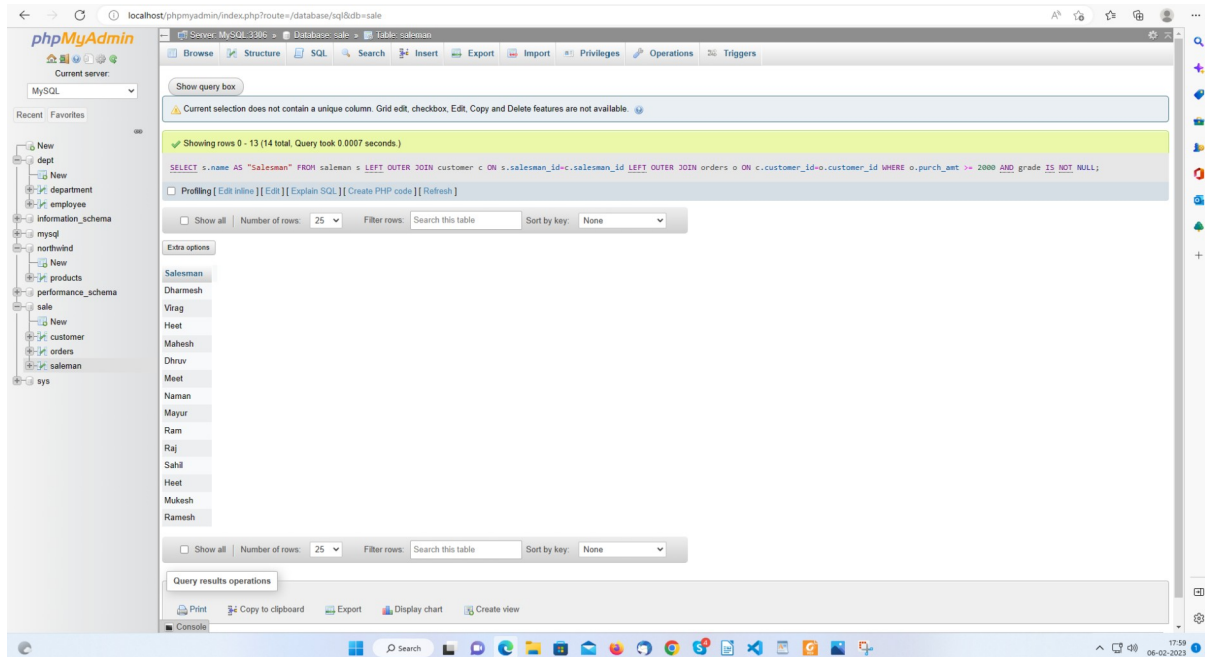
Showing rows 0 - 13 (14 total. Query took 0.0007 seconds.)

```
SELECT s.name AS "Salesman" FROM salesman s LEFT OUTER JOIN customer c ON s.salesman_id=c.salesman_id LEFT OUTER JOIN orders o ON c.customer_id=o.customer_id WHERE o.purch_amt >= 2000 AND grade IS NOT NULL;
```

Salesman
Dharmesh
Virag
Heet
Mahesh
Dhruv
Meet
Naman
Mayur
Ram
Raj
Sahil
Heet
Mukesh
Ramesh

15. Write a SQL statement to generate a list of all the salesmen who either work for one or more customers or have yet to join any of them. The customer may have placed one or more orders at or above order amount 2000, and must have a grade, or he may not have placed any orders to the associated supplier.

```
SELECT s.name AS "Salesman" FROM salesman s LEFT OUTER JOIN customer c ON s
.salesman_id=c.salesman_id LEFT OUTER JOIN orders o ON c.customer_id=o.cus
tomer_id WHERE o.purch_amt >= 2000 AND grade IS NOT NULL;
```



16. Write a SQL statement to generate a report with the customer name, city, order no. order date, purchase amount for only those customers on the list who must have a grade and placed one or more orders or which order(s) have been placed by the customer who neither is on the list nor has a grade.

```
SELECT c.cust_name AS 'customer name', c.city, o.ord_no as 'order no.', o.ord_date as 'order
date', o.purch_amt AS 'purchase
amount' FROM customer c JOIN orders o ON c.customer_id=o.customer_id WHERE (c.grad
e is not NULL and o.ord_no is null) or ( o.ord_no in ( SELECT oe.ord_no from orders oe W
HERE oe.customer_id NOT IN (SELECT customer_id from customer)));
```

NO DATA

17. Write a SQL query to combine each row of the salesman table with each row of the customer table

```
SELECT * FROM saleman s CROSS JOIN customer c;
```

salesman_id	name	city	commission	customer_id	cust_name	city	grade	salesman_id
1	Raj	Surat	12	10	Ramesh	Surat	A	9
2	Meet	Vadodara	14	10	Ramesh	Surat	A	9
3	Dhruv	Bardoli	7	10	Ramesh	Surat	A	9
4	Sahil	Valsad	18	10	Ramesh	Surat	A	9
5	Mahesh	Rajkot	14	10	Ramesh	Surat	A	9
6	Ram	Anand	9	10	Ramesh	Surat	A	9
7	Sagar	Kutch	24	10	Ramesh	Surat	A	9
8	Bhavesh	Ahmedabad	34	10	Ramesh	Surat	A	9
9	Mayur	Surat	13	10	Ramesh	Surat	A	9
10	Heet	Ankleshwar	27	10	Ramesh	Surat	A	9
11	Naman	Mehsana	32	10	Ramesh	Surat	A	9
12	Sohil	Bhavnagar	3	10	Ramesh	Surat	A	9
13	Jenil	Palanpur	45	10	Ramesh	Surat	A	9
14	Virag	Jamnagar	19	10	Ramesh	Surat	A	9
15	Jeel	Amreli	11	10	Ramesh	Surat	A	9
16	Mukesh	Surat	21	10	Ramesh	Surat	A	9
17	Kishor	Vadodara	8	10	Ramesh	Surat	A	9
18	Dharmesh	Surendranagar	16	10	Ramesh	Surat	A	9
19	Ramesh	Bhavnagar	26	10	Ramesh	Surat	A	9
20	Mansukh	Gandhinagar	25	10	Ramesh	Surat	A	9
1	Raj	Surat	12	11	Mahesh	Valsad	A	19
2	Meet	Vadodara	14	11	Mahesh	Valsad	A	19
	Dhruv	Bardoli	7	11	Mahesh	Valsad	A	19

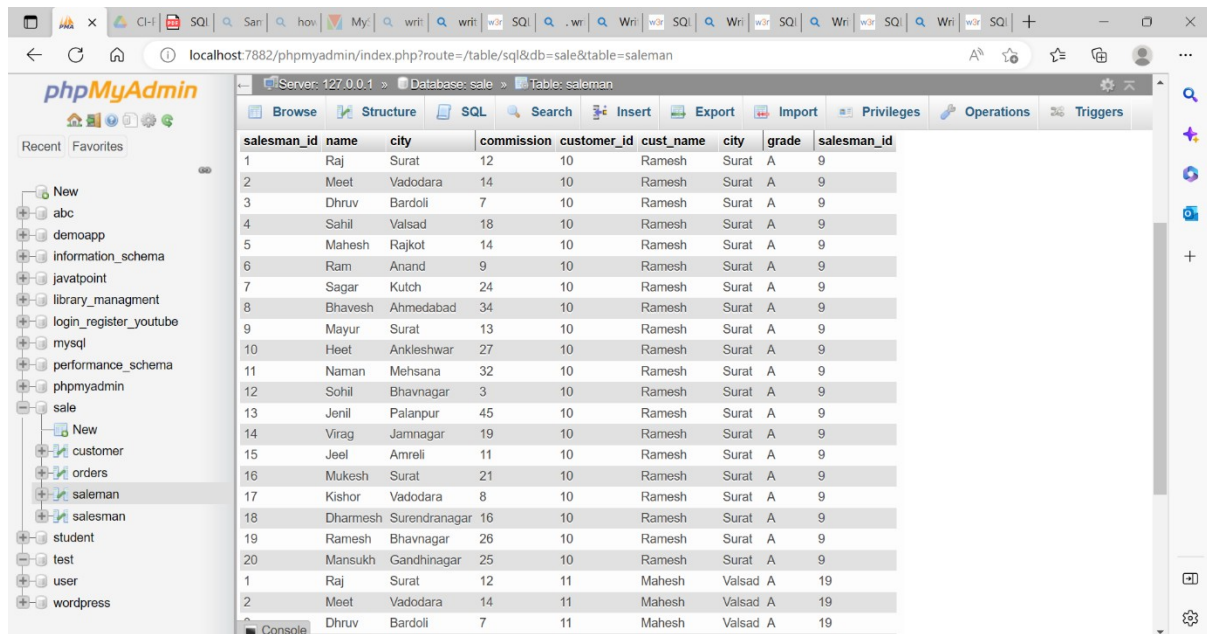
18. Write a SQL statement to create a Cartesian product between salesperson and customer, i.e. each salesperson will appear for all customers and vice versa for that salesperson who belongs to that city

```
SELECT * FROM saleman s CROSS JOIN customer c WHERE s.city IS NOT NULL;
```

salesman_id	name	city	commission	customer_id	cust_name	city	grade	salesman_id
1	Raj	Surat	12	10	Ramesh	Surat	A	9
2	Meet	Vadodara	14	10	Ramesh	Surat	A	9
3	Dhruv	Bardoli	7	10	Ramesh	Surat	A	9
4	Sahil	Valsad	18	10	Ramesh	Surat	A	9
5	Mahesh	Rajkot	14	10	Ramesh	Surat	A	9
6	Ram	Anand	9	10	Ramesh	Surat	A	9
7	Sagar	Kutch	24	10	Ramesh	Surat	A	9
8	Bhavesh	Ahmedabad	34	10	Ramesh	Surat	A	9
9	Mayur	Surat	13	10	Ramesh	Surat	A	9
10	Heet	Ankleshwar	27	10	Ramesh	Surat	A	9
11	Naman	Mehsana	32	10	Ramesh	Surat	A	9
12	Sohil	Bhavnagar	3	10	Ramesh	Surat	A	9
13	Jenil	Palanpur	45	10	Ramesh	Surat	A	9
14	Virag	Jamnagar	19	10	Ramesh	Surat	A	9
15	Jeel	Amreli	11	10	Ramesh	Surat	A	9
16	Mukesh	Surat	21	10	Ramesh	Surat	A	9
17	Kishor	Vadodara	8	10	Ramesh	Surat	A	9
18	Dharmesh	Surendranagar	16	10	Ramesh	Surat	A	9
19	Ramesh	Bhavnagar	26	10	Ramesh	Surat	A	9
20	Mansukh	Gandhinagar	25	10	Ramesh	Surat	A	9
1	Raj	Surat	12	11	Mahesh	Valsad	A	19
2	Meet	Vadodara	14	11	Mahesh	Valsad	A	19
	Dhruv	Bardoli	7	11	Mahesh	Valsad	A	19

19. Write a SQL statement to create a Cartesian product between salesperson and customer, i.e. each salesperson will appear for every customer and vice versa for those salesmen who belong to a city and customers who require a grade

```
SELECT * FROM saleman s CROSS JOIN customer c WHERE s.city IS NOT NULL AND c.grade IS NOT NULL;
```



The screenshot shows the phpMyAdmin interface for a database named 'sale'. The 'saleman' table is selected, and its structure and data are displayed. The table has 9 columns: salesman\_id, name, city, commission, customer\_id, cust\_name, city, grade, and salesman\_id. The data is as follows:

salesman_id	name	city	commission	customer_id	cust_name	city	grade	salesman_id
1	Raj	Surat	12	10	Ramesh	Surat	A	9
2	Meet	Vadodara	14	10	Ramesh	Surat	A	9
3	Dhruv	Bardoli	7	10	Ramesh	Surat	A	9
4	Sahil	Valsad	18	10	Ramesh	Surat	A	9
5	Mahesh	Rajkot	14	10	Ramesh	Surat	A	9
6	Ram	Anand	9	10	Ramesh	Surat	A	9
7	Sagar	Kutch	24	10	Ramesh	Surat	A	9
8	Bhavesh	Ahmedabad	34	10	Ramesh	Surat	A	9
9	Mayur	Surat	13	10	Ramesh	Surat	A	9
10	Heet	Ankleshwar	27	10	Ramesh	Surat	A	9
11	Naman	Mehsana	32	10	Ramesh	Surat	A	9
12	Sohil	Bhavnagar	3	10	Ramesh	Surat	A	9
13	Jenil	Palanpur	45	10	Ramesh	Surat	A	9
14	Virag	Jamnagar	19	10	Ramesh	Surat	A	9
15	Jeel	Amreli	11	10	Ramesh	Surat	A	9
16	Mukesh	Surat	21	10	Ramesh	Surat	A	9
17	Kishor	Vadodara	8	10	Ramesh	Surat	A	9
18	Dharmesh	Surendranagar	16	10	Ramesh	Surat	A	9
19	Ramesh	Bhavnagar	26	10	Ramesh	Surat	A	9
20	Mansukh	Gandhinagar	25	10	Ramesh	Surat	A	9
1	Raj	Surat	12	11	Mahesh	Valsad	A	19
2	Meet	Vadodara	14	11	Mahesh	Valsad	A	19
	Dhruv	Bardoli	7	11	Mahesh	Valsad	A	19

20. Write a SQL statement to make a Cartesian product between salesman and customer i.e. each salesman will appear for all customers and vice versa for those salesmen who must belong to a city which is not the same as his customer and the customers should have their own grade

```
SELECT * FROM saleman s CROSS JOIN customer c WHERE s.city IS NOT NULL AND c.grade IS NOT NULL AND s.city <> c.city;
```



localhost:7882/phpmyadmin/index.php?route=/table/sql&db=sale&table=saleman

Server: 127.0.0.1 » Database: sale » Table: saleman

Browse Structure SQL Search Insert Export Import Privileges Operations Triggers

salesman_id	name	city	commission	customer_id	cust_name	city	grade	salesman_id
2	Meet	Vadodara	14	10	Ramesh	Surat	A	9
3	Dhruv	Bardoli	7	10	Ramesh	Surat	A	9
4	Sahil	Valsad	18	10	Ramesh	Surat	A	9
5	Mahesh	Rajkot	14	10	Ramesh	Surat	A	9
6	Ram	Anand	9	10	Ramesh	Surat	A	9
7	Sagar	Kutch	24	10	Ramesh	Surat	A	9
8	Bhavesh	Ahmedabad	34	10	Ramesh	Surat	A	9
10	Heet	Ankleshwar	27	10	Ramesh	Surat	A	9
11	Naman	Mehsana	32	10	Ramesh	Surat	A	9
12	Sohil	Bhavnagar	3	10	Ramesh	Surat	A	9
13	Jenil	Palanpur	45	10	Ramesh	Surat	A	9
14	Virag	Jamnagar	19	10	Ramesh	Surat	A	9
15	Jeel	Amreli	11	10	Ramesh	Surat	A	9
17	Kishor	Vadodara	8	10	Ramesh	Surat	A	9
18	Dharmesh	Surendranagar	16	10	Ramesh	Surat	A	9
19	Ramesh	Bhavnagar	26	10	Ramesh	Surat	A	9
20	Mansukh	Gandhinagar	25	10	Ramesh	Surat	A	9
1	Raj	Surat	12	11	Mahesh	Valsad	A	19
2	Meet	Vadodara	14	11	Mahesh	Valsad	A	19
3	Dhruv	Bardoli	7	11	Mahesh	Valsad	A	19
5	Mahesh	Rajkot	14	11	Mahesh	Valsad	A	19
6	Ram	Anand	9	11	Mahesh	Valsad	A	19
	Sagar	Kutch	24	11	Mahesh	Valsad	A	19

Console