

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

Sample table1: salesman -salesman\_id -name -city -commission

Sample table2: customer -customer\_id -cust\_name -city -grade -salesman\_id

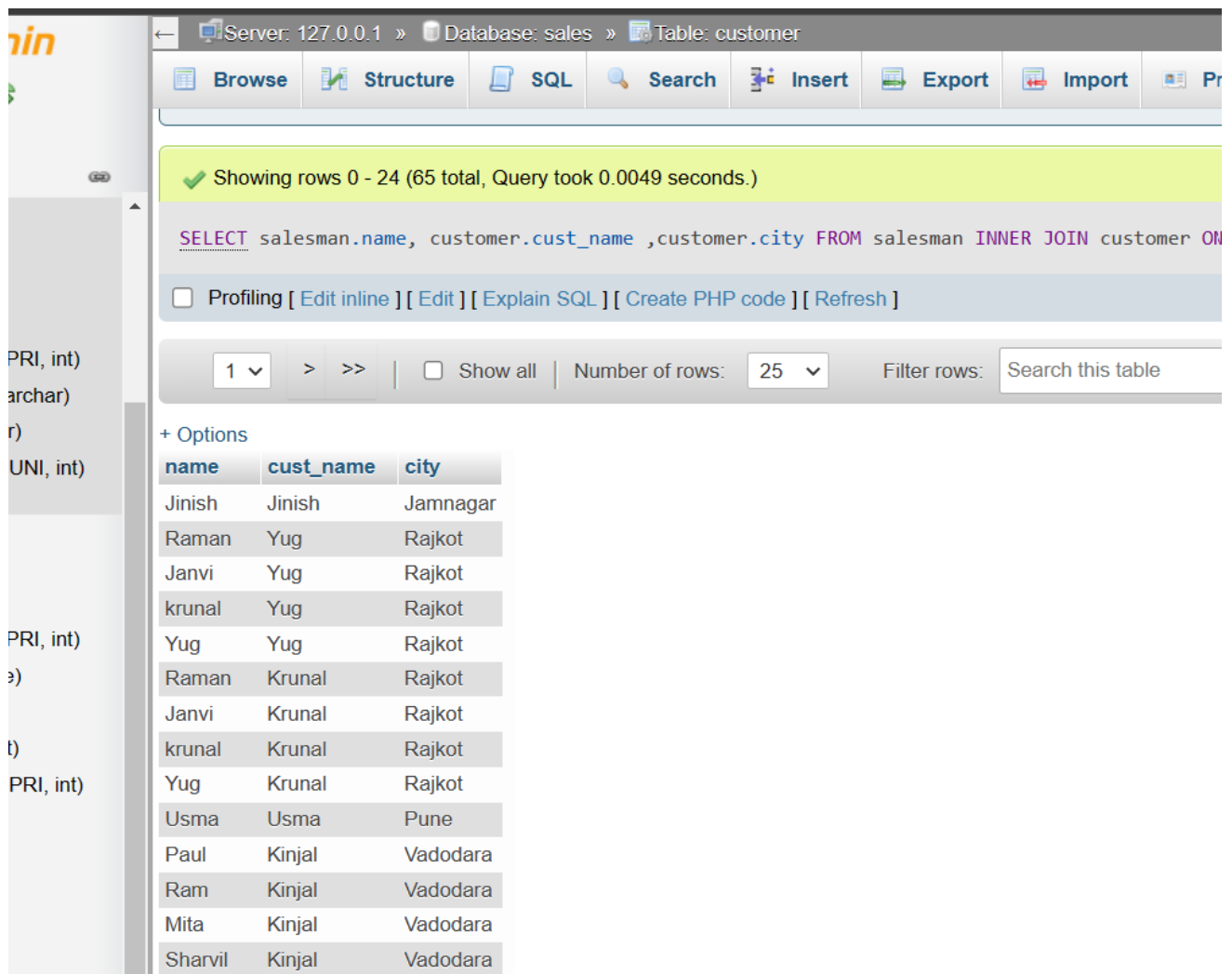
Sample table3: orders -ord\_no -purch\_amt -ord\_date -customer\_id -salesman\_id

**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
```

```
INNER JOIN customer ON salesman.city = customer.city;
```



Server: 127.0.0.1 » Database: sales » Table: customer

Showing rows 0 - 24 (65 total, Query took 0.0049 seconds.)

```
SELECT salesman.name, customer.cust_name ,customer.city FROM salesman INNER JOIN customer ON salesman.city = customer.city;
```

☐ Profiling [ [Edit inline](#) ] [ [Edit](#) ] [ [Explain SQL](#) ] [ [Create PHP code](#) ] [ [Refresh](#) ]

1 > >> | ☐ Show all | Number of rows: 25 | Filter rows: Search this table

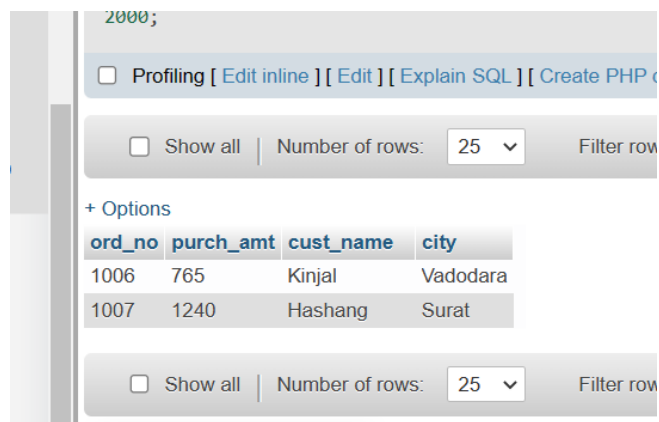
+ Options

name	cust_name	city
Jinish	Jinish	Jamnagar
Raman	Yug	Rajkot
Janvi	Yug	Rajkot
krunal	Yug	Rajkot
Yug	Yug	Rajkot
Raman	Krunal	Rajkot
Janvi	Krunal	Rajkot
krunal	Krunal	Rajkot
Yug	Krunal	Rajkot
Usma	Usma	Pune
Paul	Kinjal	Vadodara
Ram	Kinjal	Vadodara
Mita	Kinjal	Vadodara
Sharvil	Kinjal	Vadodara

## Vrushank\_PHP

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.

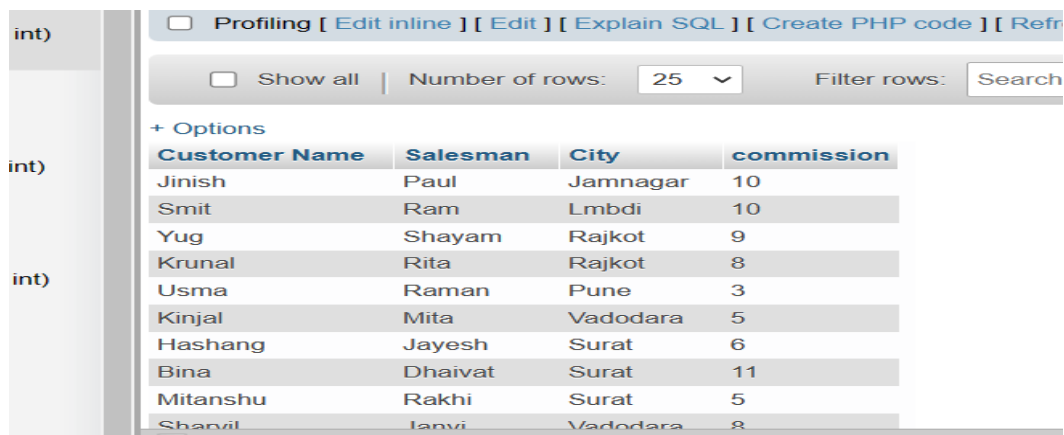
```
SELECT o.ord_no,  
       o.purch_amt,  
       c.cust_name,  
       c.city  
FROM orders o  
INNER JOIN customer c  
ON o.customer_id = c.customer_id  
WHERE o.purch_amt BETWEEN 500 AND 2000;
```



ord_no	purch_amt	cust_name	city
1006	765	Kinjal	Vadodara
1007	1240	Hashang	Surat

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



Customer Name	Salesman	City	commission
Jinish	Paul	Jamnagar	10
Smit	Ram	Lmbdi	10
Yug	Shayam	Rajkot	9
Krunal	Rita	Rajkot	8
Usma	Raman	Pune	3
Kinjal	Mita	Vadodara	5
Hashang	Jayesh	Surat	6
Bina	Dhaivat	Surat	11
Mitanshu	Rakhi	Surat	5
Shanvil	Janvi	Vadodara	8

## Vrushank\_PHP

**3.write a SQL query to find salespeople who received commissions of more than 9 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 "Salesman People",  
       s.commission  
FROM customer c  
INNER JOIN salesman s  
ON c.salesman_id = s.salesman_id  
WHERE s.commission > 9;
```



The screenshot shows a SQL query execution interface. The query is: `SELECT c.cust_name AS "Customer Name", c.city AS "Customer city", s.name AS "Salesman People", s.commission FROM customer c INNER JOIN salesman s ON c.salesman_id = s.salesman_id WHERE s.commission > 9;`. Below the query, there are options for Profiling, Edit inline, Edit, Explain SQL, Create PHP code, and Refresh. The results are displayed in a table with 4 columns: Customer Name, Customer city, Salesman People, and commission. The table contains 5 rows of data.

Customer Name	Customer city	Salesman People	commission
Jinish	Jamnagar	Paul	10
Smit	Lmbdi	Ram	10
Bina	Surat	Dhaivat	11
Ram	Vadodara	Smit	10
Paul	Vadodara	Jinish	11

**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 AS "Customer City",  
       s.name AS "Salesman",  
       s.city AS "Salesman City",  
       s.commission  
FROM customer c  
INNER JOIN salesman s  
ON c.salesman_id = s.salesman_id  
WHERE s.commission > 0.12 AND c.city != s.city;
```

## Vrushank\_PHP

```
SELECT c.cust_name AS "Customer Name", c.city AS "Customer City", s.name  
JOIN salesman s ON c.salesman_id = s.salesman_id WHERE s.commission > 0
```

☐ Profiling [ [Edit inline](#) ] [ [Edit](#) ] [ [Explain SQL](#) ] [ [Create PHP code](#) ] [ [Refresh](#) ]

☐ Show all | Number of rows:  Filter rows:

+ Options

Customer Name	Customer City	Salesman	Salesman City	commission
Jinish	Jamnagar	Paul	Vadodara	10
Smit	Lmbdi	Ram	Vadodara	10
Yug	Rajkot	Shayam	Bharuch	9
Krunal	Rajkot	Rita	Surat	8
Usma	Pune	Raman	Rajkot	3
Hashang	Surat	Jayesh	Ahmedabad	6
Bina	Surat	Dhaivat	Ahmedabad	11
Mitanshu	Surat	Rakhi	Bhavnagar	5
Sharvil	Vadodara	Janvi	Rajkot	8
Janvi	Rajkot	Sharvil	Vadodara	8
Rakhi	Bhavnagar	Mitanshu	Surat	3
Dhavaat	Ahmedabad	Bina	Surat	4
Jayesh	Ahmedabad	Harshang	Surat	5
Raman	Rajkot	Usma	Pune	9
Rita	Surat	krunal	Rajkot	9
Shayam	Bharuch	Yug	Rajkot	7

☐ Console

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",  
       s.name AS "Salesman",  
       s.commission  
FROM orders o  
INNER JOIN customer c  
ON o.customer_id=c.customer_id  
INNER JOIN salesman s
```

## Vrushank\_PHP

ON o.salesman\_id=s.salesman\_id;

ord_no	ord_date	purch_amt	Customer Name	Salesman	commission
1001	2023-02-01	2500	Jinish	Paul	10
1002	2023-02-02	5000	Smit	Ram	10
1003	2023-01-01	2500	Yug	Shayam	9
1004	2020-02-15	5000	Krunal	Rita	8
1005	2020-02-15	456	Usma	Raman	3
1006	2022-12-06	765	Kinjal	Mita	5
1007	2023-01-05	1240	Hashang	Jayesh	6
1008	2023-02-06	5000	Bina	Dhaivat	11
1009	2019-01-12	3000	Mitanshu	Rakhi	5
1010	2020-11-03	3500	Sharvil	Janvi	8
1011	2018-12-08	4500	Janvi	Sharvil	8
1012	2016-01-02	7500	Rakhi	Mitanshu	3
1013	2019-02-03	4500	Dhavaait	Bina	4
1014	2019-05-04	6000	Jayesh	Harshang	5
1015	2018-04-21	7000	Mita	Kinjal	9
1016	2020-05-30	6500	Raman	Usma	9
1017	2020-05-30	8500	Rita	krunal	9

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;

☐ Show all

Number of rows: 25 ▾

Filter rows:

Sort by key: None ▾

+ Options

salesman_id	city	customer_id	ord_no	purch_amt	ord_date	cust_name	grade	name	commission
6	Vadodara	106	1006	765	2022-12-06	Kinjal	C	Mita	5
15	Vadodara	115	1015	7000	2018-04-21	Mita	B	Kinjal	9

## Vrushank\_PHP

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      c.cust_name AS "Customer Name",
            c.city AS "Customer City",c.grade,
            s.name AS "Salesman", s.city AS "Salesman City"

FROM customer c

LEFT JOIN salesman s

ON c.salesman_id=s.salesman_id

ORDER BY c.customer_id ASC;
```

☐ Show all

Number of rows: 25 ▾

Filter rows:

+ Options

Customer Name	Customer City	grade	Salesman	Salesman City
Jinish	Jamnagar	A	Paul	Vadodara
Smit	Lmbdi	B	Ram	Vadodara
Yug	Rajkot	B	Shayam	Bharuch
Krunal	Rajkot	A	Rita	Surat
Usma	Pune	A	Raman	Rajkot
Kinjal	Vadodara	C	Mita	Vadodara
Hashang	Surat	A	Jayesh	Ahmedabad
Bina	Surat	D	Dhaivat	Ahmedabad
Mitanshu	Surat	B	Rakhi	Bhavnagar
Sharvil	Vadodara	D	Janvi	Rajkot
Janvi	Rajkot	B	Sharvil	Vadodara
Rakhi	Bhavnagar	B	Mitanshu	Surat
Dhavaait	Ahmedabad	C	Bina	Surat
Jayesh	Ahmedabad	A	Harshang	Surat
Mita	Vadodara	B	Kinjal	Vadodara

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

```
SELECT c.cust_name AS "Customer Name",
       c.city AS "Cuctomer City" ,c.grade,
       s.name AS "Salesman", s.city AS "Salesman City"

FROM customer c

LEFT JOIN salesman s

ON c.salesman_id=s.salesman_id
```

## Vrushank\_PHP

WHERE c.grade ="A"

ORDER BY c.customer\_id ASC;

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☐ Show all | Number of rows: 25  Filter rows:

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Customer Name	Customer City	grade	Salesman	Salesman City
Jinish	Jamnagar	A	Paul	Vadodara
Krunal	Rajkot	A	Rita	Surat
Usma	Pune	A	Raman	Rajkot
Hashang	Surat	A	Jayesh	Ahmedabad
Jayesh	Ahmedabad	A	Harshang	Surat
Ram	Vadodara	A	Smit	Limbi
Paul	Vadodara	A	Jinish	Jamnagar

**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 AS "Customer Name",

c.city,

o.ord\_no,

o.ord\_date,

o.purch\_amt

FROM customer c

LEFT OUTER JOIN orders o

ON c.customer\_id=o.customer\_id

ORDER BY o.ord\_date;

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☐ Show all | Number of rows: 25  Filter rows:

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Customer Name	city	ord_no	ord_date	purch_amt
Rakhi	Bhavnagar	1012	2016-01-02	7500
Mita	Vadodara	1015	2018-04-21	7000
Janvi	Rajkot	1011	2018-12-08	4500
Mitanshu	Surat	1009	2019-01-12	3000
Dhavait	Ahmedabad	1013	2019-02-03	4500
Jayesh	Ahmedabad	1014	2019-05-04	6000
Usma	Pune	1005	2020-02-15	456
Krunal	Rajkot	1004	2020-02-15	5000
Raman	Rajkot	1016	2020-05-30	6500
Rita	Surat	1017	2020-05-30	8500
Shayam	Bharuch	1018	2020-09-23	6352

## Vrushank\_PHP

**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 AS "Customer Name",  
       c.city,  
       o.ord_no AS "Order Name",  
       o.ord_date AS "Order Date",  
       o.purch_amt AS "Order Amount",  
       s.name AS "Salesman",  
       s.commission  
FROM customer c  
LEFT OUTER JOIN orders o  
  ON c.customer_id=o.customer_id  
LEFT OUTER JOIN salesman s  
  ON c.salesman_id=s.salesman_id;
```

+ Options

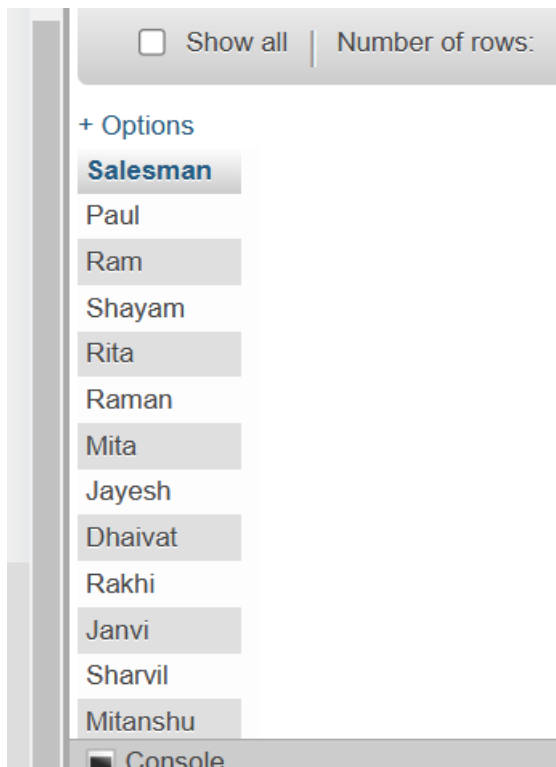
Customer Name	city	Order Name	Order Date	Order Amount	Salesman	commission
Jinish	Jamnagar	1001	2023-02-01	2500	Paul	10
Smit	Lmbdi	1002	2023-02-02	5000	Ram	10
Yug	Rajkot	1003	2023-01-01	2500	Shayam	9
Krunal	Rajkot	1004	2020-02-15	5000	Rita	8
Usma	Pune	1005	2020-02-15	456	Raman	3
Kinjal	Vadodara	1006	2022-12-06	765	Mita	5
Hashang	Surat	1007	2023-01-05	1240	Jayesh	6
Bina	Surat	1008	2023-02-06	5000	Dhaivat	11
Mitanshu	Surat	1009	2019-01-12	3000	Rakhi	5
Sharvil	Vadodara	1010	2020-11-03	3500	Janvi	8
Janvi	Rajkot	1011	2018-12-08	4500	Sharvil	8
Paul	Surat	1012	2019-01-02	7500	Mitanshu	8



## Vrushank\_PHP

**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 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  
ORDER BY c.salesman_id ASC;
```



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

```
SELECT  
    s.name AS "Salesman",  
    c.cust_name AS "Customer Name",  
    c.city,  
    c.grade,  
    o.ord_no,  
    o.ord_date,  
    o.purch_amt
```

**Vrushank\_PHP**

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;

+ Options

Salesman	Customer Name	city	grade	ord_no	ord_date	purch_amt
Paul	Jinish	Jamnagar	A	1001	2023-02-01	2500
Ram	Smit	Lmbdi	B	1002	2023-02-02	5000
Shayam	Yug	Rajkot	B	1003	2023-01-01	2500
Rita	Krunal	Rajkot	A	1004	2020-02-15	5000
Raman	Usma	Pune	A	1005	2020-02-15	456
Mita	Kinjal	Vadodara	C	1006	2022-12-06	765
Jayesh	Hashang	Surat	A	1007	2023-01-05	1240
Dhaivat	Bina	Surat	D	1008	2023-02-06	5000
Rakhi	Mitanshu	Surat	B	1009	2019-01-12	3000
Janvi	Sharvil	Vadodara	D	1010	2020-11-03	3500
Sharvil	Janvi	Rajkot	B	1011	2018-12-08	4500
Mitanshu	Rakhi	Bhavnagar	B	1012	2016-01-02	7500
Bina	Dhavit	Ahmedabad	C	1013	2019-02-03	4500
Harshang	Jayesh	Ahmedabad	A	1014	2019-05-04	6000
Kinjal	Mita	Vadodara	B	1015	2018-04-21	7000
Usma	Raman	Rajkot	C	1016	2020-05-30	6500
krunal	Rita	Surat	D	1017	2020-05-30	8500
Yug	Shayam	Bharuch	B	1018	2020-09-23	6352
Smit	Ram	Vadodara	A	1019	2023-10-25	3600
Jinish	Paul	Vadodara	A	1020	2023-10-25	5500

**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

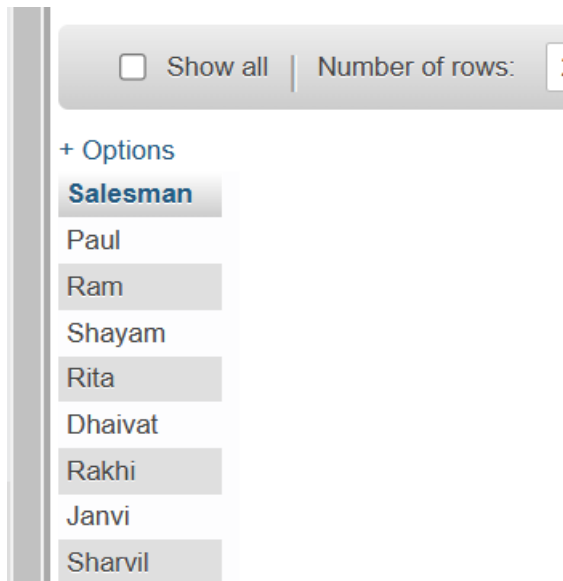
LEFT OUTER JOIN customer c

ON s.salesman\_id=c.salesman\_id

LEFT OUTER JOIN orders o

## Vrushank\_PHP

```
ON c.customer_id=o.customer_id  
WHERE o.purch_amt >= 2000  
AND grade IS NOT NULL;
```



The screenshot shows a web interface with a dropdown menu. At the top, there is a checkbox labeled 'Show all' and a text input field labeled 'Number of rows:'. Below this, there is a section titled '+ Options' with a dropdown menu labeled 'Salesman'. The dropdown menu is open, showing a list of names: Paul, Ram, Shayam, Rita, Dhaivat, Rakhi, Janvi, and Sharvil. The 'Salesman' label is highlighted in blue.

**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,  
       o.ord_date,  
       o.purch_amt  
FROM customer c  
FULL OUTER JOIN orders o ON c.customer_id= o.customer_id  
AND c.grade IS NOT NULL;
```

## Vrushank\_PHP

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

```
SELECT s.name AS "Salesman",  
       c.cust_name AS "Customer Name"  
FROM salesman s  
CROSS JOIN customer c;
```

 Showing rows 0 - 399 (400 total, Query took 0.0019 seconds.)

```
SELECT s.name AS "Salesman", c.cust_name AS "Customer Name" FROM sa
```

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☒ Show all | Number of rows: All  | Filter rows:

+ Options

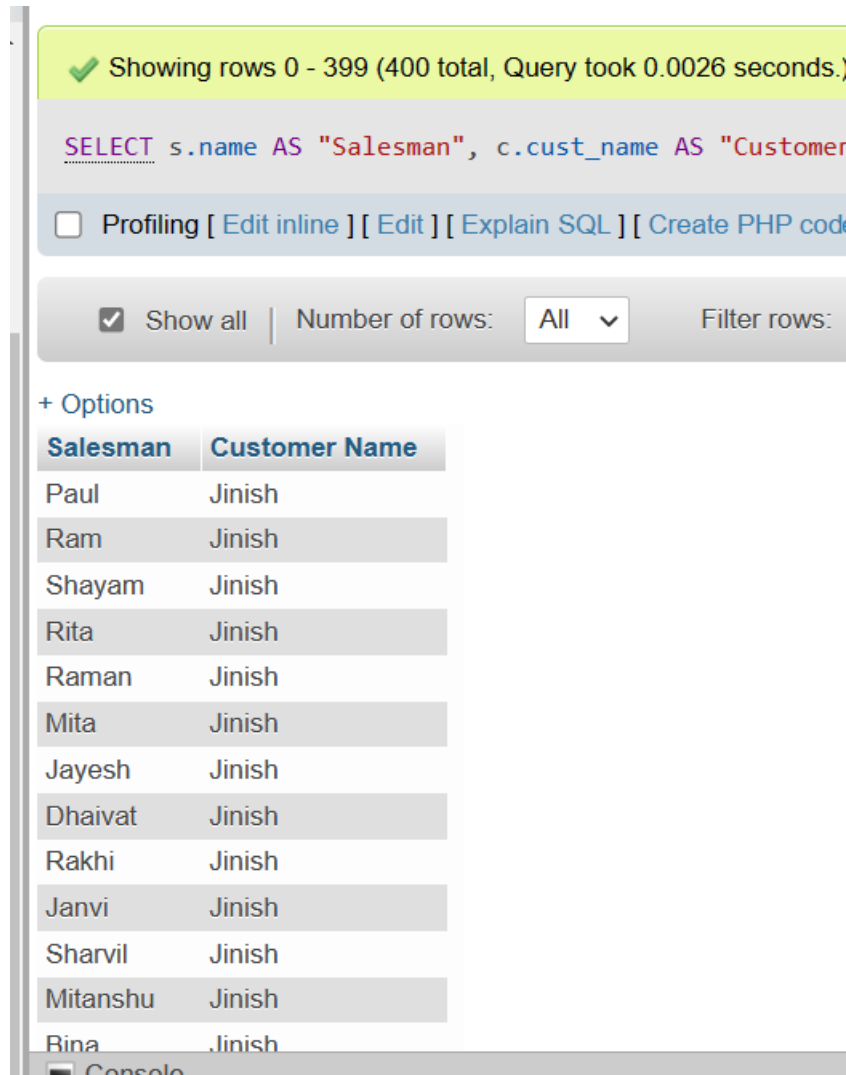
Salesman	Customer Name
Paul	Jinish
Ram	Jinish
Shayam	Jinish
Rita	Jinish
Raman	Jinish
Mita	Jinish
Jayesh	Jinish
Dhaivat	Jinish
Rakhi	Jinish
Janvi	Jinish
Sharvil	Jinish
Mitanshu	Jinish
Bina	Jinish

☒ Console

## Vrushank\_PHP

**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 s.name AS "Salesman",  
       c.cust_name AS "Customer Name"  
FROM salesman s  
CROSS JOIN customer c  
WHERE s.city IS NOT NULL;
```



✓ Showing rows 0 - 399 (400 total, Query took 0.0026 seconds.)

```
SELECT s.name AS "Salesman", c.cust_name AS "Customer Name"
```

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☒ Show all | Number of rows:  Filter rows:

+ Options


Salesman	Customer Name
Paul	Jinish
Ram	Jinish
Shayam	Jinish
Rita	Jinish
Raman	Jinish
Mita	Jinish
Jayesh	Jinish
Dhaivat	Jinish
Rakhi	Jinish
Janvi	Jinish
Sharvil	Jinish
Mitanshu	Jinish
Bina	Jinish

☒ Console

## Vrushank\_PHP


**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 s.name AS "Salesman",  
       c.cust_name AS "Customer Name"  
FROM salesman s  
CROSS JOIN customer c  
WHERE s.city IS NOT NULL  
AND c.grade IS NOT NULL;
```

 Showing rows 0 - 399 (400 total, Query took 0.0056 seconds.)

```
SELECT s.name AS "Salesman", c.cust_name AS "Customer Name" F
```

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☒ Show all | Number of rows: All  | Filter rows:


+ Options

Salesman	Customer Name
Paul	Jinish
Ram	Jinish
Shayam	Jinish
Rita	Jinish
Raman	Jinish
Mita	Jinish
Jayesh	Jinish
Dhaivat	Jinish
Rakhi	Jinish
Janvi	Jinish
Sharvil	Jinish
Mitanshu	Jinish
Bina	Jinish

## Vrushank\_PHP

**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 s.name AS "Salesman",  
       c.cust_name AS "Customer Name"  
FROM salesman s  
CROSS JOIN customer c  
WHERE s.city IS NOT NULL  
      AND s.city != c.city  
      AND c.grade IS NOT NULL;
```

 Showing rows 0 - 334 (335 total, Query took 0.0055 seconds.)

```
SELECT s.name AS "Salesman", c.cust_name AS "Customer Name"  
c.grade IS NOT NULL;
```

☐ Profiling [ [Edit inline](#) ] [ [Edit](#) ] [ [Explain SQL](#) ] [ [Create PHP code](#) ] [ [Refresh](#) ]

☒ Show all | Number of rows:  | Filter rows:

+ Options

Salesman	Customer Name
Paul	Jinish
Ram	Jinish
Shayam	Jinish
Rita	Jinish
Raman	Jinish
Mita	Jinish
Jayesh	Jinish
Dhaivat	Jinish
Rakhi	Jinish
Janvi	Jinish
Sharvil	Jinish
Mitanshu	Jinish