MySQL Assignment - 2

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

```
select s.name as Salesman, c.cust_name, s.city from salesman s,
customer c where s.city=c.city;
```

	Salesman	cust_name	city
▶	Prokta	Bhargav	Mysore
	Prasanna	Ramya	Bengalore
	Pooja	Rajesh	Hubli
	Prasanna	Bhavya	Bengalore
	Manan	Mahesh	Surat

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.pur_amt, c.cust_name, c.city  from orders o
inner join customer c on o.customer_id=c.customer_id and
o.pur_amt >= 500 and o.pur_amt<=2000;
```

	ord_no	pur_amt	cust_name	city
▶	17	1500	Ramya	Bengalore

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, c.city, s.name salesname, s.commission from
customer c inner join salesman s on c.salesman_id=s.salesman_id;
```

	cust_name	city	salesname	commission
▶	Bhargav	Mysore	Prokta	200.2
	Ramya	Bengalore	Prasanna	300
	Rajesh	Hubli	Prajwal	100
	Bhavya	Bengalore	Prokta	200.2
	Ravi	Mangalore	Pooja	500.5
	Rajdeep	Belagavi	Prokta	200.2
	Raghu	Dharavad	Prajwal	100
	Mahesh	Surat	Manan	4000
	Ramesh	Delhi	Ayush	2000

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, c.city, s.name as salesman, s.commission
from (orders o inner join salesman s on o.salesman_id =
s.salesman_id) inner join customer c on c.salesman_id =
s.salesman_id where s.commission/o.pur_amt > 0.12;
```

cust_name	city	salesman	commission
Mahesh	Surat	Manan	4000
Ramesh	Delhi	Ayush	2000

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, c.city, s.name as salesman, s.city,
s.commission from (orders o inner join salesman s on
o.salesman_id=s.salesman_id) inner join customer c on
c.salesman_id=s.salesman_id where s.commission/o.pur_amt > 0.12
and s.city!=c.city;
```

	cust_name	city	salesman	city	commission
▶	Ramesh	Delhi	Ayush	Ahmedabad	2000

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.pur_amt, c.cust_name, c.city,
s.name as salesman, s.city, s.commission from (orders o inner
join salesman s on o.salesman_id=s.salesman_id) inner join
customer c on c.salesman_id=s.salesman_id;
```

ord_no	ord_date	pur_amt	cust_name	city	salesman	city	commission
10	2020-03-25	5000	Bhargav	Mysore	Prokta	Mysore	200.2
11	2020-07-07	8700	Ramya	Bengalore	Prasanna	Bengalore	300
17	2020-07-07	1500	Rajesh		Prajwal	Kodagu	100
10	2020-03-25	5000	Bhavya	Bengalore	Prokta	Mysore	200.2
7	2020-04-30	9500	Ravi	Mangalore	Pooja	Hubli	500.5
10	2020-03-25	5000	Rajdeep	Belagavi	Prokta	Mysore	200.2
17	2020-07-07	1500	Raghu	Dharavad	Prajwal	Kodagu	100
25	2023-02-02	8000	Mahesh	Surat	Manan	Surat	4000
21	2023-02-06	6000	Ramesh	Delhi	Ayush	Ahmedabad	2000

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 o.ord_no, o.pur_amt, o.ord_date, s.salesman_id, s.name,
s.city, s.commission,c.customer_id, c.cust_name, c.city as
customerCity, c.grade  from (orders o inner join salesman s on
o.salesman_id=s.salesman_id) inner join customer c on
c.salesman_id=s.salesman_id;
```

ord_no	pur_amt	ord_date	salesman_id	name	city	commission	customer_id	cust_name	customerCity	grade
10	5000	2020-03-25	15	Prokta	Mysore	200.2	101	Bhargav	Mysore	1
11	8700	2020-07-07	24	Prasanna	Bengalore	300	206	Ramya	Bengalore	3
17	1500	2020-07-07	39	Prajwal	Kodagu	100	225	Rajesh	Hubli	2
10	5000	2020-03-25	15	Prokta	Mysore	200.2	300	Bhavya	Bengalore	1
7	9500	2020-04-30	44	Pooja	Hubli	500.5	324	Ravi	Mangalore	5
10	5000	2020-03-25	15	Prokta	Mysore	200.2	456	Rajdeep	Belagavi	3
17	1500	2020-07-07	39	Prajwal	Kodagu	100	501	Raghu	Dharavad	4
25	8000	2023-02-02	60	Manan	Surat	4000	510	Mahesh	Surat	3
21	6000	2023-02-06	56	Ayush	Ahmedabad	2000	520	Ramesh	Delhi	3

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, c.city, c.grade, s.name as SalesName, s.city
as SalesmanCity from customer c inner join salesman s on
s.salesman_id = c.salesman_id order by c.customer_id;
```

cust_name	city	grade	SalesName	SalesmanCity
Bhargav	Mysore	1	Prokta	Mysore
Ramya	Bengalore	3	Prasanna	Bengalore
Rajesh	Hubli	2	Prajwal	Kodagu
Bhavya	Bengalore	1	Prokta	Mysore
Ravi	Mangalore	5	Pooja	Hubli
Rajdeep	Belagavi	3	Prokta	Mysore
Raghu	Dharavad	4	Prajwal	Kodagu
Mahesh	Surat	3	Manan	Surat
Ramesh	Delhi	3	Ayush	Ahmedabad

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 SalesName, s.city
as SalesmanCity from customer c left join salesman s on
s.salesman_id = c.salesman_id where c.grade < 3 order by
c.customer_id ;
```

cust_name	city	grade	SalesName	SalesmanCity
Bhargav	Mysore	1	Prokta	Mysore
Rajesh	Hubli	2	Prajwal	Kodagu
Bhavya	Bengalore	1	Prokta	Mysore

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.pur_amt from
customer c left join orders o on c.customer_id = o.customer_id
order by o.ord_date;
```

cust_name	city	ord_no	ord_date	pur_amt
Bhavya	Bengalore	NULL	NULL	NULL
Raghu	Dharavad	NULL	NULL	NULL
Ramesh	Delhi	NULL	NULL	NULL
Bhargav	Mysore	5	2020-03-25	10000
Rajdeep	Belagavi	10	2020-03-25	5000
Rajesh	Hubli	7	2020-04-30	9500
Ramya	Bengalore	17	2020-07-07	1500
Ravi	Mangalore	11	2020-07-07	8700
Mahesh	Surat	25	2023-02-02	8000
Ramya	Bengalore	21	2023-02-06	6000

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.pur_amt,
s.name as SalesName, s.commission from (customer c left join
orders o on c.customer_id = o.customer_id) left join salesman s
on o.salesman_id=s.salesman_id;
```

cust_name	city	ord_no	ord_date	pur_amt	SalesName	commission
Bhargav	Mysore	5	2020-03-25	10000	Pranav	200
Ramya	Bengalore	17	2020-07-07	1500	Prajwal	100
Ramya	Bengalore	21	2023-02-06	6000	Ayush	2000
Rajesh	Hubli	7	2020-04-30	9500	Pooja	500.5
Bhavya	Bengalore	NULL	NULL	NULL	NULL	NULL
Ravi	Mangalore	11	2020-07-07	8700	Prasanna	300
Rajdeep	Belagavi	10	2020-03-25	5000	Prokta	200.2
Raghu	Dharavad	NULL	NULL	NULL	NULL	NULL
Mahesh	Surat	25	2023-02-02	8000	Manan	4000
Ramesh	Delhi	NULL	NULL	NULL	NULL	NULL

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.salesman_id, s.name as SalesName, s.city as
SalesPersonCity, s.commission, c.customer_id, c.cust_name,
c.city as CustomerCity,c.grade  from salesman s left join
customer c on s.salesman_id=c.salesman_id order by s.name;
```

	salesman_id	SalesName	SalesPersonCity	commission	customer_id	cust_name	CustomerCity	grade
▶	56	Ayush	Ahmedabad	2000	520	Ramesh	Delhi	3
	60	Manan	Surat	4000	510	Mahesh	Surat	3
	44	Pooja	Hubli	500.5	324	Ravi	Mangalore	5
	39	Prajwal	Kodagu	100	225	Rajesh	Hubli	2
	39	Prajwal	Kodagu	100	501	Raghu	Dharavad	4
	11	Pranav	Karwar	200	NULL	NULL	NULL	NULL
	24	Prasanna	Bengalore	300	206	Ramya	Bengalore	3
	15	Prokta	Mysore	200.2	101	Bhargav	Mysore	1
	15	Prokta	Mysore	200.2	300	Bhavya	Bengalore	1
	15	Prokta	Mysore	200.2	456	Rajdeep	Belagavi	3

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

```
select s.name as SalesName, c.cust_name, c.city, c.grade,
o.ord_no, o.ord_date, o.pur_amt from salesman s left join
customer c on s.salesman_id=c.salesman_id left join orders o on
o.customer_id=c.customer_id;
```

SalesName	cust_name	city	grade	ord_no	ord_date	pur_amt
Pranav	NULL	NULL	NULL	NULL	NULL	NULL
Prokta	Bhargav	Mysore	1	5	2020-03-25	10000
Prokta	Bhavya	Bengalore	1	NULL	NULL	NULL
Prokta	Rajdeep	Belagavi	3	10	2020-03-25	5000
Prasanna	Ramya	Bengalore	3	17	2020-07-07	1500
Prasanna	Ramya	Bengalore	3	21	2023-02-06	6000
Prajwal	Rajesh	Hubli	2	7	2020-04-30	9500
Prajwal	Raghu	Dharavad	4	NULL	NULL	NULL
Pooja	Ravi	Mangalore	5	11	2020-07-07	8700
Ayush	Ramesh	Delhi	3	NULL	NULL	NULL
Manan	Mahesh	Surat	3	25	2023-02-02	8000

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 c.cust_name, c.city, c.grade, o.ord_no, o.ord_date,
o.pur_amt from (salesman s left join customer c on
s.salesman_id=c.salesman_id) left join orders o on
o.customer_id=c.customer_id where (o.pur_amt >= 2000 and c.grade
is not null);
```

cust_name	city	grade	ord_no	ord_date	pur_amt
Bhargav	Mysore	1	5	2020-03-25	10000
Rajesh	Hubli	2	7	2020-04-30	9500
Rajdeep	Belagavi	3	10	2020-03-25	5000
Ravi	Mangalore	5	11	2020-07-07	8700
Ramya	Bengalore	3	21	2023-02-06	6000
Mahesh	Surat	3	25	2023-02-02	8000

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 c.cust_name, c.city, c.grade, o.ord_no, o.ord_date,
o.pur_amt from (salesman s left join customer c on
s.salesman_id=c.salesman_id) left join orders o on
o.customer_id=c.customer_id where (o.pur_amt >= 2000 and c.grade
is not null);
```

	cust_name	city	grade	ord_no	ord_date	pur_amt
▶	Bhargav	Mysore	1	5	2020-03-25	10000
	Rajesh	Hubli	2	7	2020-04-30	9500
	Rajdeep	Belagavi	3	10	2020-03-25	5000
	Ravi	Mangalore	5	11	2020-07-07	8700
	Ramya	Bengalore	3	21	2023-02-06	6000
	Mahesh	Surat	3	25	2023-02-02	8000

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, c.city, o.ord_no, o.ord_date from customer c
inner join orders o on c.customer_id=o.customer_id where c.grade
is not null;
```

cust_name	city	ord_no	ord_date
Bhargav	Mysore	5	2020-03-25
Rajesh	Hubli	7	2020-04-30
Rajdeep	Belagavi	10	2020-03-25
Ravi	Mangalore	11	2020-07-07
Ramya	Bengalore	17	2020-07-07
Ramya	Bengalore	21	2023-02-06
Mahesh	Surat	25	2023-02-02

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

```
select * from salesman s cross join customer c;
```

salesman_id	name	city	commission	customer_id	cust_name	city	grade	salesma
60	Manan	Surat	4000	101	Bhargav	Mysore	1	15
56	Ayush	Ahmedabad	2000	101	Bhargav	Mysore	1	15
44	Pooja	Hubli	500.5	101	Bhargav	Mysore	1	15
39	Prajwal	Kodagu	100	101	Bhargav	Mysore	1	15
24	Prasanna	Bengalore	300	101	Bhargav	Mysore	1	15
15	Prokta	Mysore	200.2	101	Bhargav	Mysore	1	15
11	Pranav	Karwar	200	101	Bhargav	Mysore	1	15
60	Manan	Surat	4000	206	Ramya	Bengalore	3	24
56	Ayush	Ahmedabad	2000	206	Ramya	Bengalore	3	24
44	Pooja	Hubli	500.5	206	Ramya	Bengalore	3	24
39	Prajwal	Kodagu	100	206	Ramya	Bengalore	3	24
24	Prasanna	Bengalore	300	206	Ramya	Bengalore	3	24
15	Prokta	Mysore	200.2	206	Ramya	Bengalore	3	24
11	Pranav	Karwar	200	206	Ramya	Bengalore	3	24
60	Manan	Surat	4000	225	Rajesh	Hubli	2	39
56	Ayush	Ahmedabad	2000	225	Rajesh	Hubli	2	39
44	Pooja	Hubli	500.5	225	Rajesh	Hubli	2	39
39	Prajwal	Kodagu	100	225	Rajesh	Hubli	2	39
24	Prasanna	Bengalore	300	225	Rajesh	Hubli	2	39
15	Prokta	Mysore	200.2	225	Rajesh	Hubli	2	39
11	Pranav	Karwar	200	225	Rajesh	Hubli	2	39
60	Manan	Surat	4000	300	Bhavya	Bengalore	1	15
56	Ayush	Ahmedabad	2000	300	Bhavya	Bengalore	1	15
44	Pooja	Hubli	500.5	300	Bhavya	Bengalore	1	15
39	Prajwal	Kodagu	100	300	Bhavya	Bengalore	1	15
24	Prasanna	Bengalore	300	300	Bhavya	Bengalore	1	15
15	Prokta	Mysore	200.2	300	Bhavya	Bengalore	1	15
11	Pranav	Karwar	200	300	Bhavya	Bengalore	1	15
60	Manan	Surat	4000	324	Ravi	Mangalore	5	44
56	Ayush	Ahmedabad	2000	324	Ravi	Mangalore	5	44
44	Pooja	Hubli	500.5	324	Ravi	Mangalore	5	44
39	Prajwal	Kodagu	100	324	Ravi	Mangalore	5	44
24	Prasanna	Bengalore	300	324	Ravi	Mangalore	5	44
15	Prokta	Mysore	200.2	324	Ravi	Mangalore	5	44
11	Pranav	Karwar	200	324	Ravi	Mangalore	5	44
60	Manan	Surat	4000	456	Rajdeep	Belagavi	3	15
56	Ayush	Ahmedabad	2000	456	Rajdeep	Belagavi	3	15
44	Pooja	Hubli	500.5	456	Rajdeep	Belagavi	3	15
39	Prajwal	Kodagu	100	456	Rajdeep	Belagavi	3	15
24	Prasanna	Bengalore	300	456	Rajdeep	Belagavi	3	15

	Pooja	Hubli	500.5	324	Ravi	Mangalore	5	44
39	Prajwal	Kodagu	100	324	Ravi	Mangalore	5	44
24	Prasanna	Bengalore	300	324	Ravi	Mangalore	5	44
15	Prokta	Mysore	200.2	324	Ravi	Mangalore	5	44
11	Pranav	Karwar	200	324	Ravi	Mangalore	5	44
60	Manan	Surat	4000	456	Rajdeep	Belagavi	3	15
56	Ayush	Ahmedabad	2000	456	Rajdeep	Belagavi	3	15
44	Pooja	Hubli	500.5	456	Rajdeep	Belagavi	3	15
39	Prajwal	Kodagu	100	456	Rajdeep	Belagavi	3	15
24	Prasanna	Bengalore	300	456	Rajdeep	Belagavi	3	15
15	Prokta	Mysore	200.2	456	Rajdeep	Belagavi	3	15
11	Pranav	Karwar	200	456	Rajdeep	Belagavi	3	15
60	Manan	Surat	4000	501	Raghu	Dharavad	4	39
56	Ayush	Ahmedabad	2000	501	Raghu	Dharavad	4	39
44	Pooja	Hubli	500.5	501	Raghu	Dharavad	4	39
39	Prajwal	Kodagu	100	501	Raghu	Dharavad	4	39
24	Prasanna	Bengalore	300	501	Raghu	Dharavad	4	39
15	Prokta	Mysore	200.2	501	Raghu	Dharavad	4	39
11	Pranav	Karwar	200	501	Raghu	Dharavad	4	39
60	Manan	Surat	4000	510	Mahesh	Surat	3	60
56	Ayush	Ahmedabad	2000	510	Mahesh	Surat	3	60
44	Pooja	Hubli	500.5	510	Mahesh	Surat	3	60
39	Prajwal	Kodagu	100	510	Mahesh	Surat	3	60
24	Prasanna	Bengalore	300	510	Mahesh	Surat	3	60
15	Prokta	Mysore	200.2	510	Mahesh	Surat	3	60
11	Pranav	Karwar	200	510	Mahesh	Surat	3	60
60	Manan	Surat	4000	520	Ramesh	Delhi	3	56
56	Ayush	Ahmedabad	2000	520	Ramesh	Delhi	3	56
44	Pooja	Hubli	500.5	520	Ramesh	Delhi	3	56
39	Prajwal	Kodagu	100	520	Ramesh	Delhi	3	56
24	Prasanna	Bengalore	300	520	Ramesh	Delhi	3	56
15	Prokta	Mysore	200.2	520	Ramesh	Delhi	3	56
11	Pranav	Karwar	200	520	Ramesh	Delhi	3	56

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 customer c cross join salesman s where
s.city=c.city;
```

customer_id	cust_name	city	grade	salesman_id	salesman_id	name	city	commission
101	Bhargav	Mysore	1	15	15	Prokta	Mysore	200.2
206	Ramya	Bengalore	3	24	24	Prasanna	Bengalore	300
225	Rajesh	Hubli	2	39	44	Pooja	Hubli	500.5
300	Bhavya	Bengalore	1	15	24	Prasanna	Bengalore	300
510	Mahesh	Surat	3	60	60	Manan	Surat	4000

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 customer c cross join salesman s where s.city is
not null and c.grade is not null ;
```

customer_id	cust_name	city	grade	salesman_id	salesman_id	name	city	commission
101	Bhargav	Mysore	1	15	60	Manan	Surat	4000
101	Bhargav	Mysore	1	15	56	Ayush	Ahmedabad	2000
101	Bhargav	Mysore	1	15	44	Pooja	Hubli	500.5
101	Bhargav	Mysore	1	15	39	Prajwal	Kodagu	100
101	Bhargav	Mysore	1	15	24	Prasanna	Bengalore	300
101	Bhargav	Mysore	1	15	15	Prokta	Mysore	200.2
101	Bhargav	Mysore	1	15	11	Pranav	Karwar	200
206	Ramya	Bengalore	3	24	60	Manan	Surat	4000
206	Ramya	Bengalore	3	24	56	Ayush	Ahmedabad	2000
206	Ramya	Bengalore	3	24	44	Pooja	Hubli	500.5
206	Ramya	Bengalore	3	24	39	Prajwal	Kodagu	100
206	Ramya	Bengalore	3	24	24	Prasanna	Bengalore	300
206	Ramya	Bengalore	3	24	15	Prokta	Mysore	200.2
206	Ramya	Bengalore	3	24	11	Pranav	Karwar	200
225	Rajesh	Hubli	2	39	60	Manan	Surat	4000
225	Rajesh	Hubli	2	39	56	Ayush	Ahmedabad	2000
225	Rajesh	Hubli	2	39	44	Pooja	Hubli	500.5
225	Rajesh	Hubli	2	39	39	Prajwal	Kodagu	100
225	Rajesh	Hubli	2	39	24	Prasanna	Bengalore	300
225	Rajesh	Hubli	2	39	15	Prokta	Mysore	200.2
225	Rajesh	Hubli	2	39	11	Pranav	Karwar	200
300	Bhavya	Bengalore	1	15	60	Manan	Surat	4000
300	Bhavya	Bengalore	1	15	56	Ayush	Ahmedabad	2000
300	Bhavya	Bengalore	1	15	44	Pooja	Hubli	500.5
300	Bhavya	Bengalore	1	15	39	Prajwal	Kodagu	100
300	Bhavya	Bengalore	1	15	24	Prasanna	Bengalore	300
300	Bhavya	Bengalore	1	15	15	Prokta	Mysore	200.2
300	Bhavya	Bengalore	1	15	11	Pranav	Karwar	200
324	Ravi	Mangalore	5	44	60	Manan	Surat	4000
324	Ravi	Mangalore	5	44	56	Ayush	Ahmedabad	2000
324	Ravi	Mangalore	5	44	44	Pooja	Hubli	500.5
324	Ravi	Mangalore	5	44	39	Prajwal	Kodagu	100
324	Ravi	Mangalore	5	44	24	Prasanna	Bengalore	300
324	Ravi	Mangalore	5	44	15	Prokta	Mysore	200.2
324	Ravi	Mangalore	5	44	11	Pranav	Karwar	200
456	Rajdeep	Belagavi	3	15	60	Manan	Surat	4000
456	Rajdeep	Belagavi	3	15	56	Ayush	Ahmedabad	2000
456	Rajdeep	Belagavi	3	15	44	Pooja	Hubli	500.5
456	Rajdeep	Belagavi	3	15	39	Prajwal	Kodagu	100
456	Rajdeep	Belagavi	3	15	24	Prasanna	Bengalore	300

456	Rajdeep	Belagavi	3	15	60	Manan	Surat	4000
456	Rajdeep	Belagavi	3	15	56	Ayush	Ahmedabad	2000
456	Rajdeep	Belagavi	3	15	44	Pooja	Hubli	500.5
456	Rajdeep	Belagavi	3	15	39	Prajwal	Kodagu	100
456	Rajdeep	Belagavi	3	15	24	Prasanna	Bengalore	300
456	Rajdeep	Belagavi	3	15	15	Prokta	Mysore	200.2
456	Rajdeep	Belagavi	3	15	11	Pranav	Karwar	200
501	Raghu	Dharavad	4	39	60	Manan	Surat	4000
501	Raghu	Dharavad	4	39	56	Ayush	Ahmedabad	2000
501	Raghu	Dharavad	4	39	44	Pooja	Hubli	500.5
501	Raghu	Dharavad	4	39	39	Prajwal	Kodagu	100
501	Raghu	Dharavad	4	39	24	Prasanna	Bengalore	300
501	Raghu	Dharavad	4	39	15	Prokta	Mysore	200.2
501	Raghu	Dharavad	4	39	11	Pranav	Karwar	200
510	Mahesh	Surat	3	60	60	Manan	Surat	4000
510	Mahesh	Surat	3	60	56	Ayush	Ahmedabad	2000
510	Mahesh	Surat	3	60	44	Pooja	Hubli	500.5
510	Mahesh	Surat	3	60	39	Prajwal	Kodagu	100
510	Mahesh	Surat	3	60	24	Prasanna	Bengalore	300
510	Mahesh	Surat	3	60	15	Prokta	Mysore	200.2
510	Mahesh	Surat	3	60	11	Pranav	Karwar	200
520	Ramesh	Delhi	3	56	60	Manan	Surat	4000
520	Ramesh	Delhi	3	56	56	Ayush	Ahmedabad	2000
520	Ramesh	Delhi	3	56	44	Pooja	Hubli	500.5
520	Ramesh	Delhi	3	56	39	Prajwal	Kodagu	100
520	Ramesh	Delhi	3	56	24	Prasanna	Bengalore	300
520	Ramesh	Delhi	3	56	15	Prokta	Mysore	200.2
520	Ramesh	Delhi	3	56	11	Pranav	Karwar	200

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 customer c cross join salesman s where s.city is
not null and s.city != c.city and c.grade is not null;
```

101	Bhargav	Mysore	1	15	60	Manan	Surat	4000
101	Bhargav	Mysore	1	15	56	Ayush	Ahmedabad	2000
101	Bhargav	Mysore	1	15	44	Pooja	Hubli	500.5
101	Bhargav	Mysore	1	15	39	Prajwal	Kodagu	100
101	Bhargav	Mysore	1	15	24	Prasanna	Bengalore	300
101	Bhargav	Mysore	1	15	11	Pranav	Karwar	200
206	Ramya	Bengalore	3	24	60	Manan	Surat	4000
206	Ramya	Bengalore	3	24	56	Ayush	Ahmedabad	2000
206	Ramya	Bengalore	3	24	44	Pooja	Hubli	500.5
206	Ramya	Bengalore	3	24	39	Prajwal	Kodagu	100
206	Ramya	Bengalore	3	24	15	Prokta	Mysore	200.2
206	Ramya	Bengalore	3	24	11	Pranav	Karwar	200
225	Rajesh	Hubli	2	39	60	Manan	Surat	4000
225	Rajesh	Hubli	2	39	56	Ayush	Ahmedabad	2000
225	Rajesh	Hubli	2	39	39	Prajwal	Kodagu	100
225	Rajesh	Hubli	2	39	24	Prasanna	Bengalore	300
225	Rajesh	Hubli	2	39	15	Prokta	Mysore	200.2
225	Rajesh	Hubli	2	39	11	Pranav	Karwar	200
300	Bhavya	Bengalore	1	15	60	Manan	Surat	4000
300	Bhavya	Bengalore	1	15	56	Ayush	Ahmedabad	2000
300	Bhavya	Bengalore	1	15	44	Pooja	Hubli	500.5
300	Bhavya	Bengalore	1	15	39	Prajwal	Kodagu	100
300	Bhavya	Bengalore	1	15	15	Prokta	Mysore	200.2
300	Bhavya	Bengalore	1	15	11	Pranav	Karwar	200
324	Ravi	Mangalore	5	44	60	Manan	Surat	4000
324	Ravi	Mangalore	5	44	56	Ayush	Ahmedabad	2000
324	Ravi	Mangalore	5	44	44	Pooja	Hubli	500.5
324	Ravi	Mangalore	5	44	39	Prajwal	Kodagu	100
324	Ravi	Mangalore	5	44	24	Prasanna	Bengalore	300
324	Ravi	Mangalore	5	44	15	Prokta	Mysore	200.2
324	Ravi	Mangalore	5	44	11	Pranav	Karwar	200
456	Rajdeep	Belagavi	3	15	60	Manan	Surat	4000
456	Rajdeep	Belagavi	3	15	56	Ayush	Ahmedabad	2000
456	Rajdeep	Belagavi	3	15	44	Pooja	Hubli	500.5
456	Rajdeep	Belagavi	3	15	39	Prajwal	Kodagu	100
456	Rajdeep	Belagavi	3	15	24	Prasanna	Bengalore	300
456	Rajdeep	Belagavi	3	15	15	Prokta	Mysore	200.2
456	Rajdeep	Belagavi	3	15	11	Pranav	Karwar	200
501	Raghu	Dharavad	4	39	60	Manan	Surat	4000
501	Raghu	Dharavad	4	39	56	Ayush	Ahmedabad	2000

324	Ravi	Mangalore	5	44	60	Manan	Surat	4000
324	Ravi	Mangalore	5	44	56	Ayush	Ahmedabad	2000
324	Ravi	Mangalore	5	44	44	Pooja	Hubli	500.5
324	Ravi	Mangalore	5	44	39	Prajwal	Kodagu	100
324	Ravi	Mangalore	5	44	24	Prasanna	Bengalore	300
324	Ravi	Mangalore	5	44	15	Prokta	Mysore	200.2
324	Ravi	Mangalore	5	44	11	Pranav	Karwar	200
456	Rajdeep	Belagavi	3	15	60	Manan	Surat	4000
456	Rajdeep	Belagavi	3	15	56	Ayush	Ahmedabad	2000
456	Rajdeep	Belagavi	3	15	44	Pooja	Hubli	500.5
456	Rajdeep	Belagavi	3	15	39	Prajwal	Kodagu	100
456	Rajdeep	Belagavi	3	15	24	Prasanna	Bengalore	300
456	Rajdeep	Belagavi	3	15	15	Prokta	Mysore	200.2
456	Rajdeep	Belagavi	3	15	11	Pranav	Karwar	200
501	Raghu	Dharavad	4	39	60	Manan	Surat	4000
501	Raghu	Dharavad	4	39	56	Ayush	Ahmedabad	2000
501	Raghu	Dharavad	4	39	44	Pooja	Hubli	500.5
501	Raghu	Dharavad	4	39	39	Prajwal	Kodagu	100
501	Raghu	Dharavad	4	39	24	Prasanna	Bengalore	300
501	Raghu	Dharavad	4	39	15	Prokta	Mysore	200.2
501	Raghu	Dharavad	4	39	11	Pranav	Karwar	200
510	Mahesh	Surat	3	60	56	Ayush	Ahmedabad	2000
510	Mahesh	Surat	3	60	44	Pooja	Hubli	500.5
510	Mahesh	Surat	3	60	39	Prajwal	Kodagu	100
510	Mahesh	Surat	3	60	24	Prasanna	Bengalore	300
510	Mahesh	Surat	3	60	15	Prokta	Mysore	200.2
510	Mahesh	Surat	3	60	11	Pranav	Karwar	200
520	Ramesh	Delhi	3	56	60	Manan	Surat	4000
520	Ramesh	Delhi	3	56	56	Ayush	Ahmedabad	2000
520	Ramesh	Delhi	3	56	44	Pooja	Hubli	500.5
520	Ramesh	Delhi	3	56	39	Prajwal	Kodagu	100
520	Ramesh	Delhi	3	56	24	Prasanna	Bengalore	300
520	Ramesh	Delhi	3	56	15	Prokta	Mysore	200.2
520	Ramesh	Delhi	3	56	11	Pranav	Karwar	200