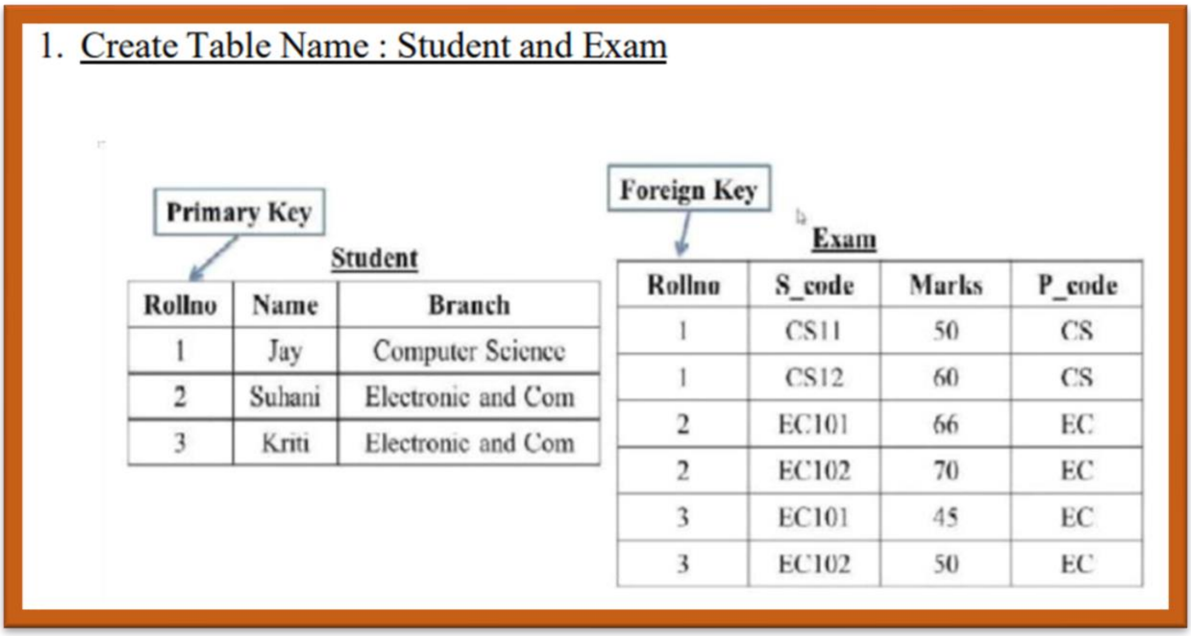
MODULE: 5 (Database)

SQL Queries

1



1. Create Table Name : Student and Exam

Primary Key

Student

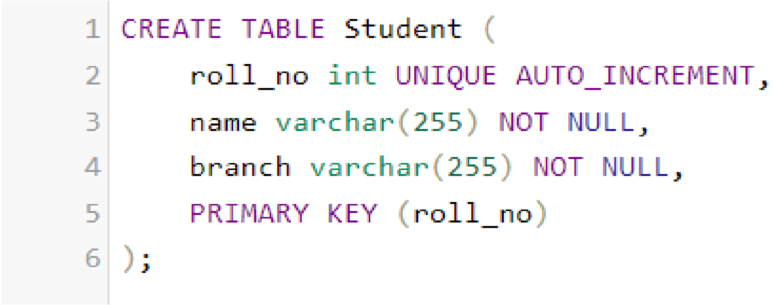
Rollno	Name	Branch
1	Jay	Computer Science
2	Suhani	Electronic and Com
3	Kriti	Electronic and Com

Foreign Key

Exam

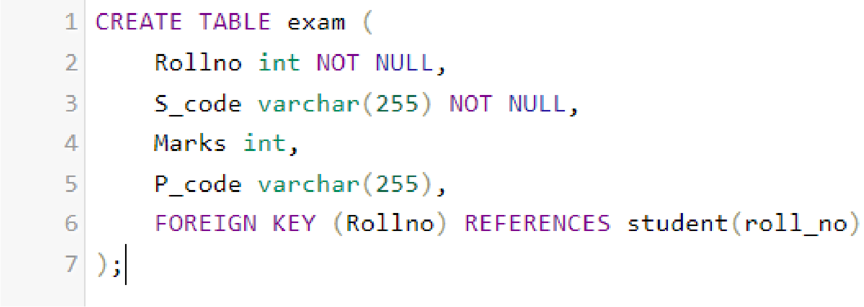
Rollno	S_code	Marks	P_code
1	CS11	50	CS
1	CS12	60	CS
2	EC101	66	EC
2	EC102	70	EC
3	EC101	45	EC
3	EC102	50	EC

Create Student Table



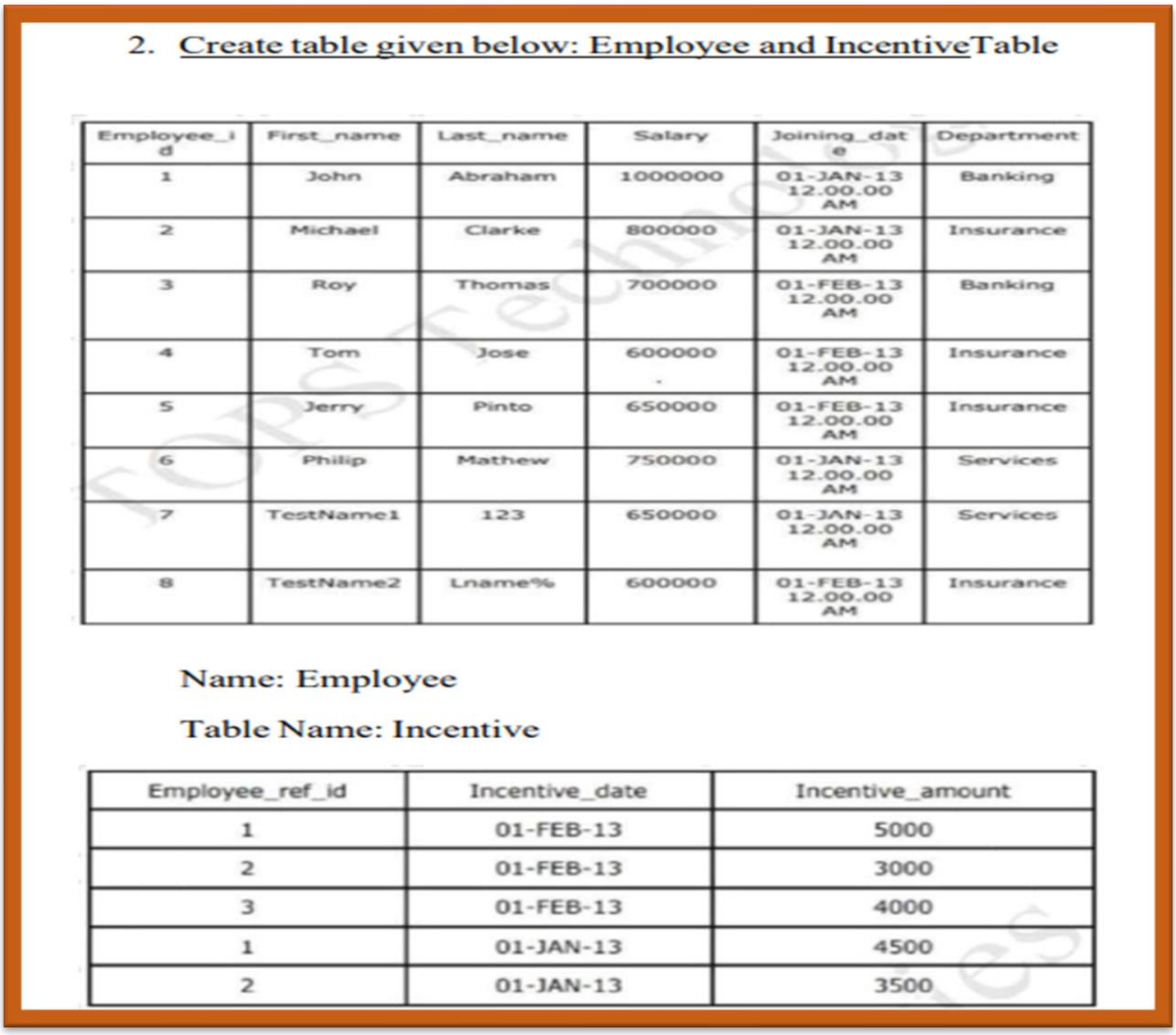
```
CREATE TABLE Student (
    roll_no int UNIQUE AUTO_INCREMENT,
    name varchar(255) NOT NULL,
    branch varchar(255) NOT NULL,
    PRIMARY KEY (roll_no)
);
```

Create Exam Table



```sql
CREATE TABLE exam (
    Rollno int NOT NULL,
    S_code varchar(255) NOT NULL,
    Marks int,
    P_code varchar(255),
    FOREIGN KEY (Rollno) REFERENCES student(roll_no)
);
```

2



2. Create table given below: Employee and IncentiveTable

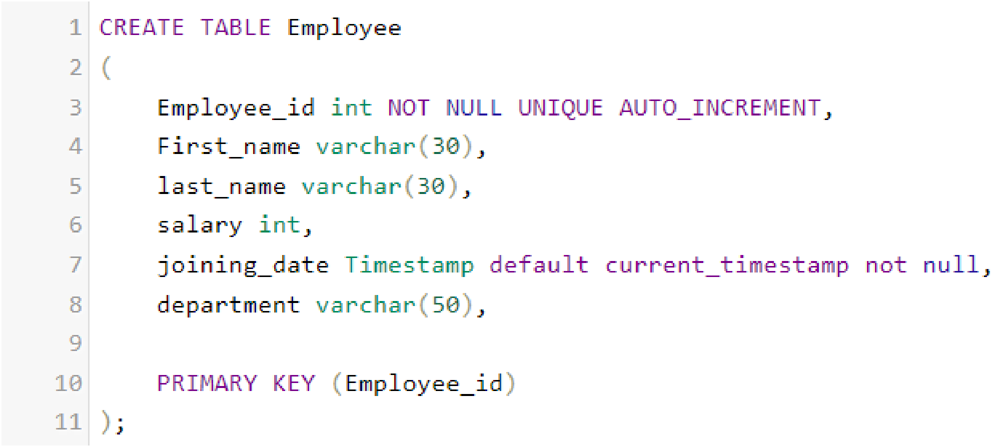
Employee_id	First_name	Last_name	Salary	Joining_date	Department
1	John	Abraham	1000000	01-JAN-13 12.00.00 AM	Banking
2	Michael	Clarke	800000	01-JAN-13 12.00.00 AM	Insurance
3	Roy	Thomas	700000	01-FEB-13 12.00.00 AM	Banking
4	Tom	Jose	600000	01-FEB-13 12.00.00 AM	Insurance
5	Jerry	Pinto	650000	01-FEB-13 12.00.00 AM	Insurance
6	Philip	Mathew	750000	01-JAN-13 12.00.00 AM	Services
7	TestName1	123	650000	01-JAN-13 12.00.00 AM	Services
8	TestName2	Lname%	600000	01-FEB-13 12.00.00 AM	Insurance

Name: Employee

Table Name: Incentive

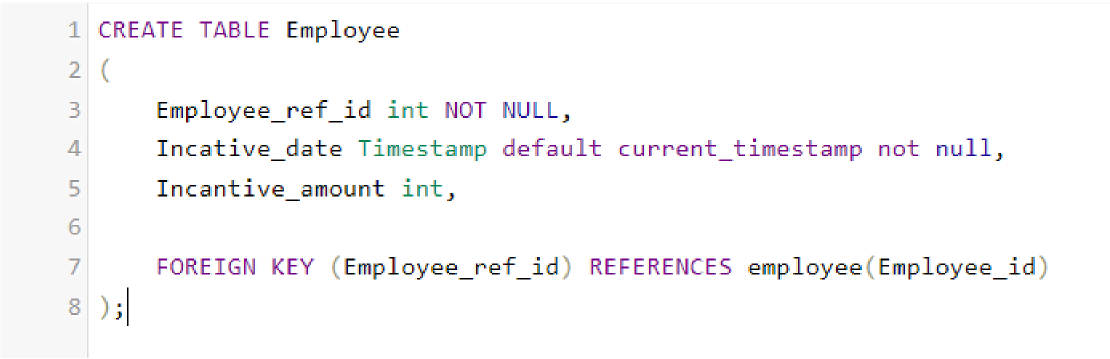
Employee_ref_id	Incentive_date	Incentive_amount
1	01-FEB-13	5000
2	01-FEB-13	3000
3	01-FEB-13	4000
1	01-JAN-13	4500
2	01-JAN-13	3500

Create Table Employee



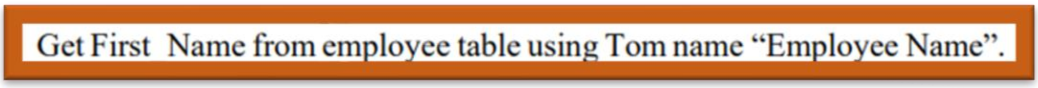
```sql
CREATE TABLE Employee
(
    Employee_id int NOT NULL UNIQUE AUTO_INCREMENT,
    First_name varchar(30),
    last_name varchar(30),
    salary int,
    joining_date Timestamp default current_timestamp not null,
    department varchar(50),

    PRIMARY KEY (Employee_id)
);
```

Create Table Incentive



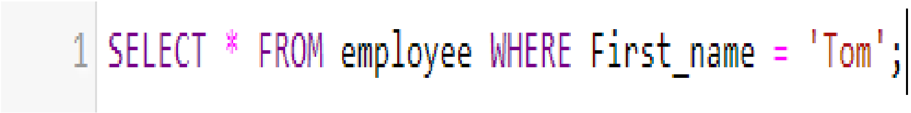
```sql
CREATE TABLE Employee
(
    Employee_ref_id int NOT NULL,
    Incative_date Timestamp default current_timestamp not null,
    Incantive_amount int,

    FOREIGN KEY (Employee_ref_id) REFERENCES employee(Employee_id)
);
```

3



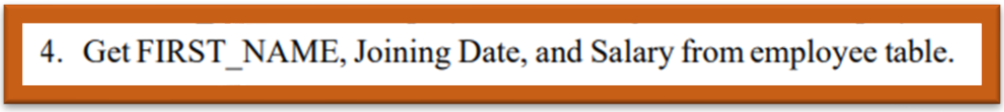
Get First Name from employee table using Tom name “Employee Name”.

Answer



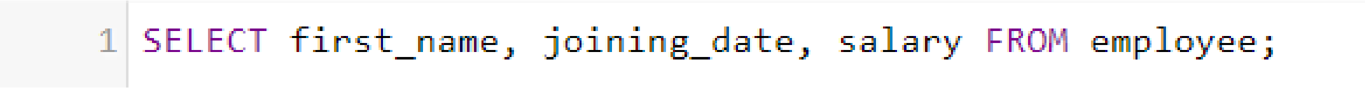
```sql
SELECT * FROM employee WHERE First_name = 'Tom';
```

4



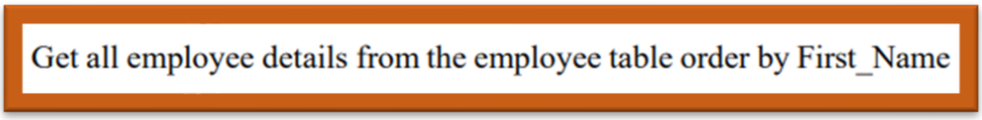
4. Get FIRST_NAME, Joining Date, and Salary from employee table.

Answer



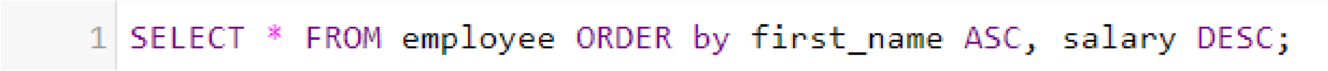
```sql
SELECT first_name, joining_date, salary FROM employee;
```

5



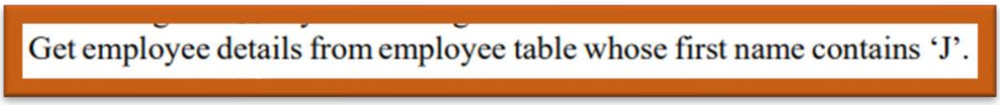
Get all employee details from the employee table order by First_Name

Answer



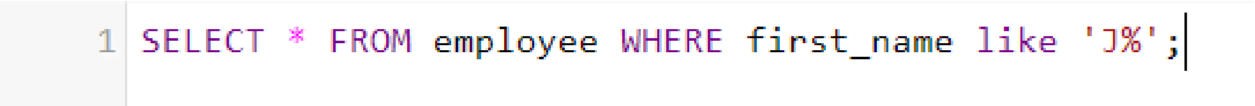
```sql
SELECT * FROM employee ORDER by first_name ASC, salary DESC;
```

6



Get employee details from employee table whose first name contains ‘J’.

Answer



```sql
SELECT * FROM employee WHERE first_name like 'J%';
```

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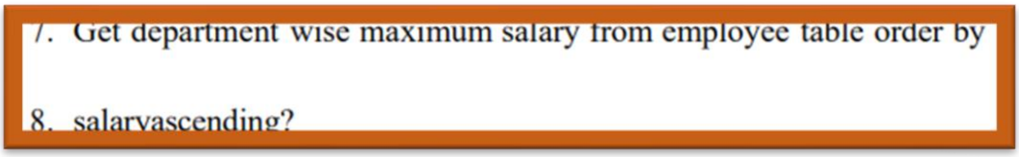
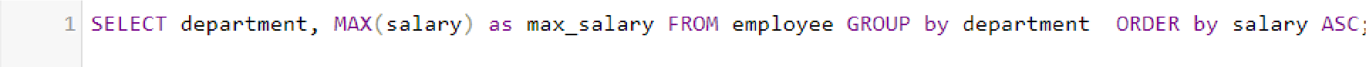
8



7. Get department wise maximum salary from employee table order by

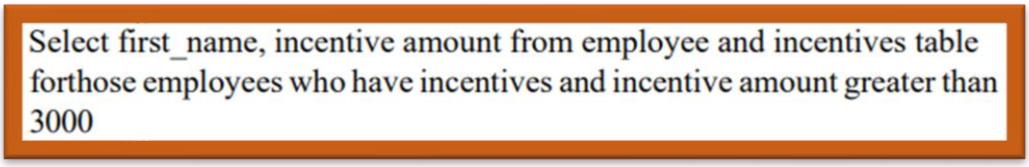
8. salaryascending?

Answer



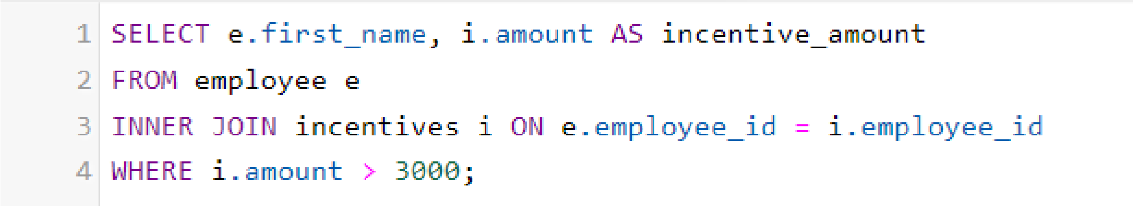
```
SELECT department, MAX(salary) as max_salary FROM employee GROUP by department  ORDER by salary ASC;
```

9



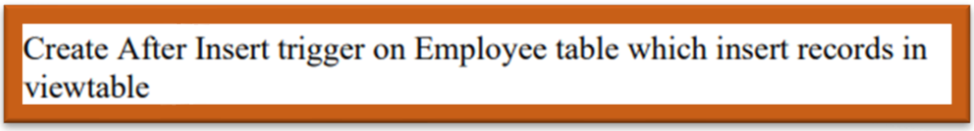
Select first_name, incentive amount from employee and incentives table forthose employees who have incentives and incentive amount greater than 3000

Answer



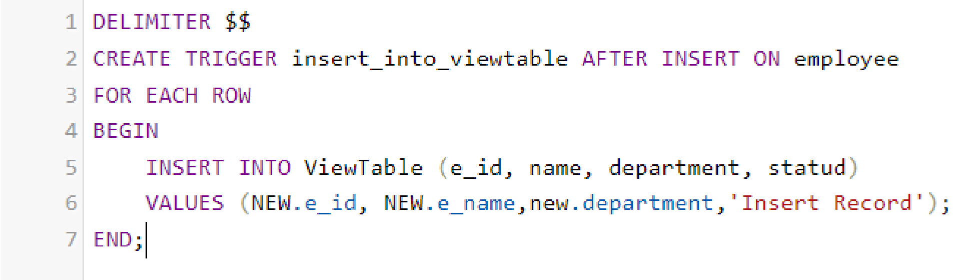
```
SELECT e.first_name, i.amount AS incentive_amount
FROM employee e
INNER JOIN incentives i ON e.employee_id = i.employee_id
WHERE i.amount > 3000;
```

10



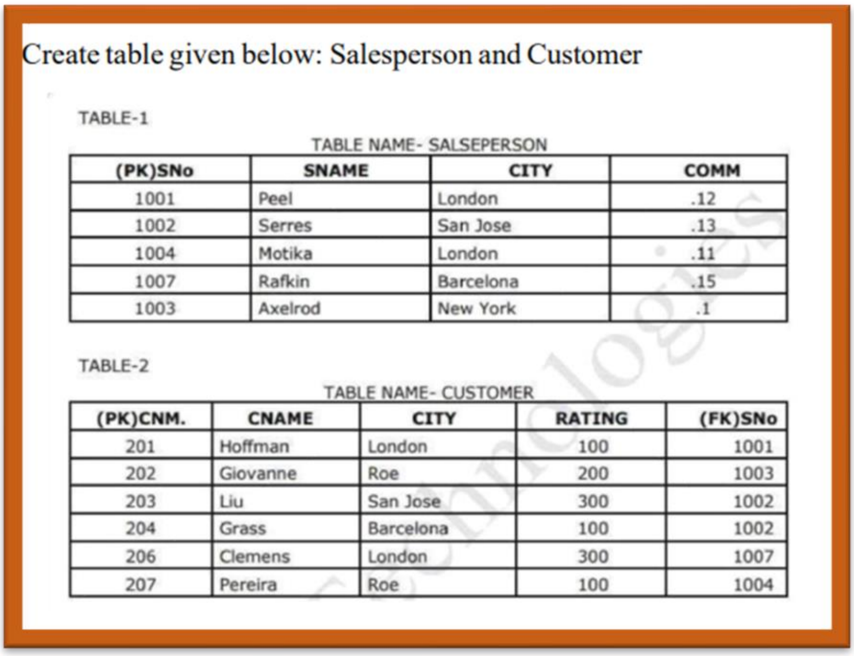
Create After Insert trigger on Employee table which insert records in viewtable

Answer



```
DELIMITER $$
CREATE TRIGGER insert_into_viewtable AFTER INSERT ON employee
FOR EACH ROW
BEGIN
    INSERT INTO ViewTable (e_id, name, department, statud)
    VALUES (NEW.e_id, NEW.e_name,new.department,'Insert Record');
END;
```

11



Create table given below: Salesperson and Customer

TABLE-1

TABLE NAME- SALSEPERSON

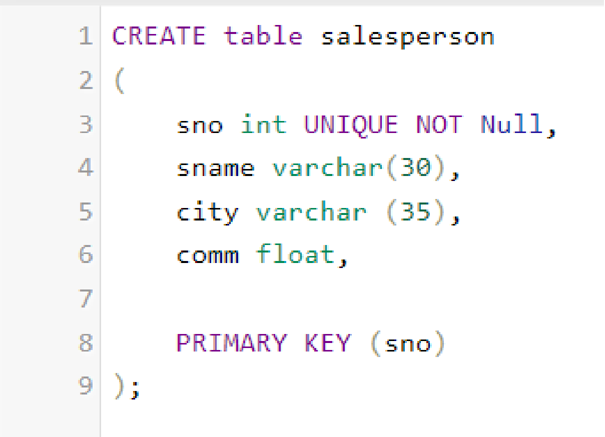
(PK)SNo	SNAME	CITY	COMM
1001	Peel	London	.12
1002	Serres	San Jose	.13
1004	Motika	London	.11
1007	Rafkin	Barcelona	.15
1003	Axelrod	New York	.1

TABLE-2

TABLE NAME- CUSTOMER

(PK)CNM.	CNAME	CITY	RATING	(FK)SNo
201	Hoffman	London	100	1001
202	Giovanne	Roe	200	1003
203	Liu	San Jose	300	1002
204	Grass	Barcelona	100	1002
206	Clemens	London	300	1007
207	Pereira	Roe	100	1004

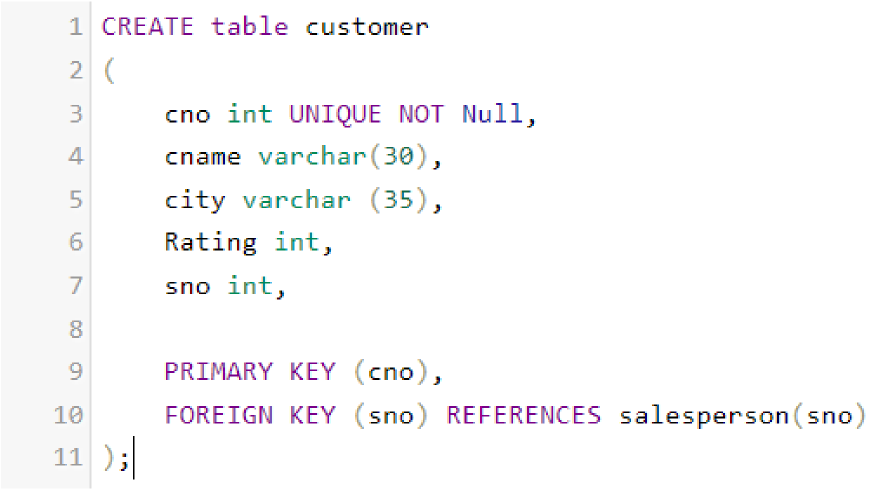
Create Salesperson Table



```
CREATE table salesperson
(
    sno int UNIQUE NOT Null,
    sname varchar(30),
    city varchar (35),
    comm float,

    PRIMARY KEY (sno)
);
```

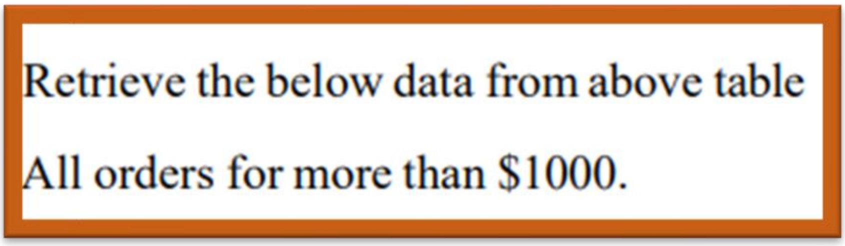
Create customer Table



```sql
CREATE table customer
(
    cno int UNIQUE NOT Null,
    cname varchar(30),
    city varchar (35),
    Rating int,
    sno int,

    PRIMARY KEY (cno),
    FOREIGN KEY (sno) REFERENCES salesperson(sno)
);
```

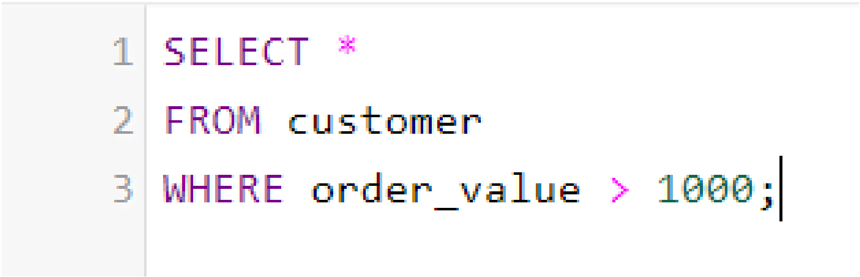
12, 13



Retrieve the below data from above table

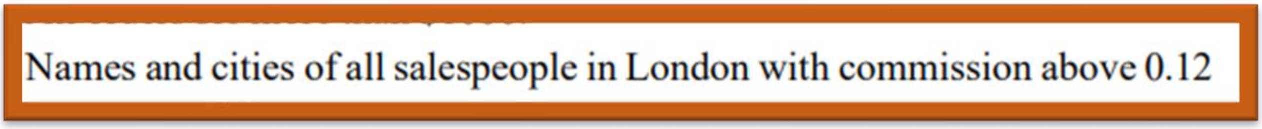
All orders for more than $1000.

Answer



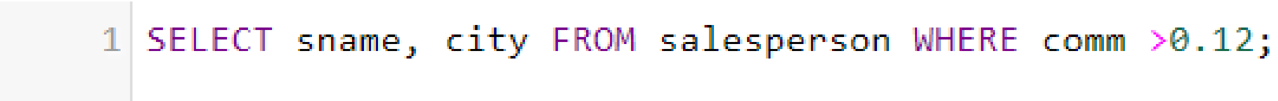
```sql
SELECT *
FROM customer
WHERE order_value > 1000;
```

14



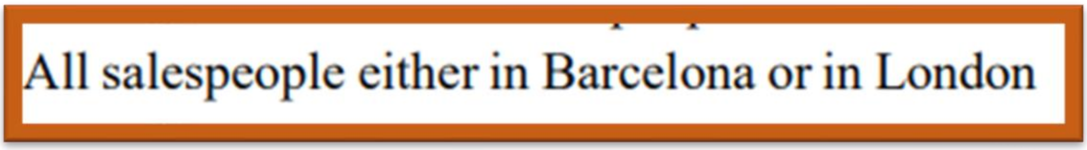
Names and cities of all salespeople in London with commission above 0.12

Answer



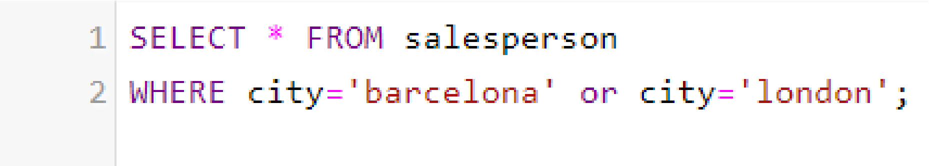
```sql
SELECT sname, city FROM salesperson WHERE comm >0.12;
```

15



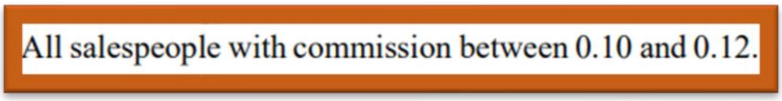
All salespeople either in Barcelona or in London

Answer



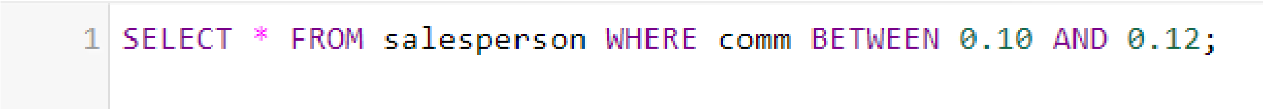
```sql
SELECT * FROM salesperson
WHERE city='barcelona' or city='london';
```

16



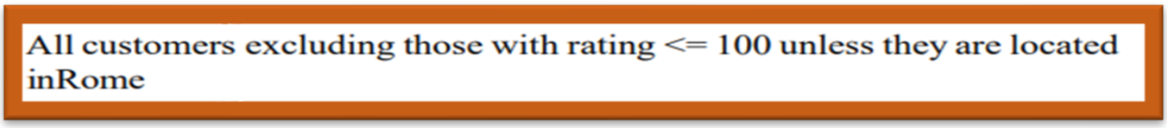
All salespeople with commission between 0.10 and 0.12.

Answer



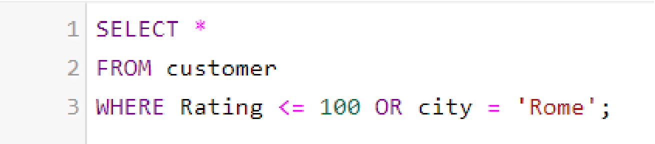
```sql
SELECT * FROM salesperson WHERE comm BETWEEN 0.10 AND 0.12;
```

17



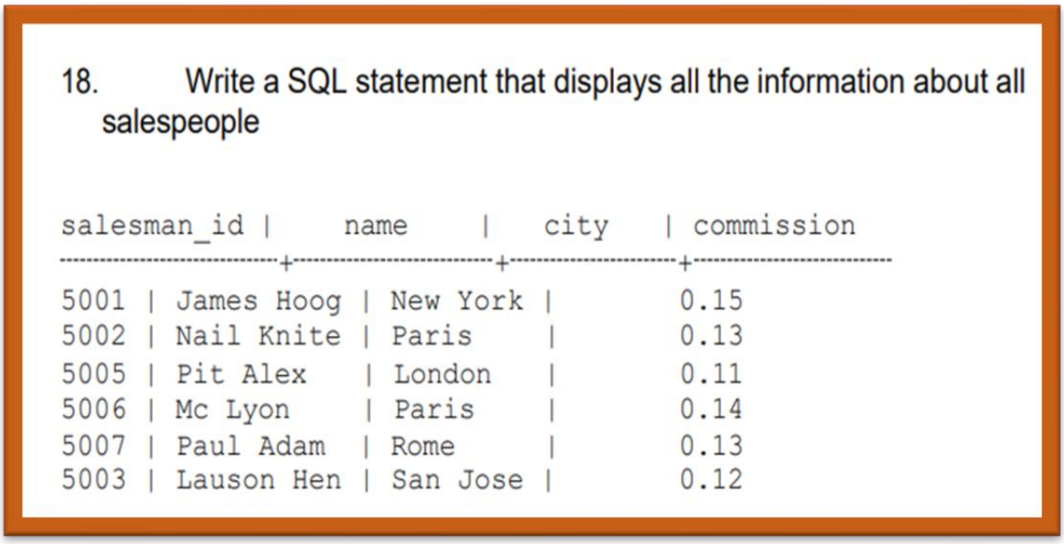
All customers excluding those with rating <= 100 unless they are located inRome

Answer



```
SELECT *
FROM customer
WHERE Rating <= 100 OR city = 'Rome';
```

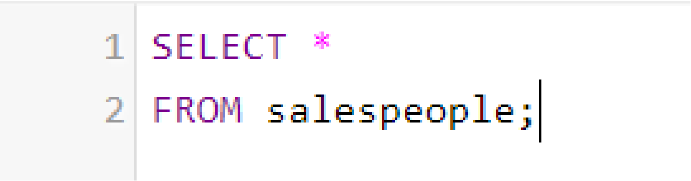
18



18. Write a SQL statement that displays all the information about all salespeople

```
salesman_id |     name     |    city    | commission
------------+--------------+------------+-----------------
5001  | James Hoog | New York |        0.15
5002  | Nail Knite | Paris    |        0.13
5005  | Pit Alex   | London   |        0.11
5006  | Mc Lyon    | Paris    |        0.14
5007  | Paul Adam  | Rome     |        0.13
5003  | Lauson Hen | San Jose |        0.12
```

Answer



```
SELECT *
FROM salespeople;
```

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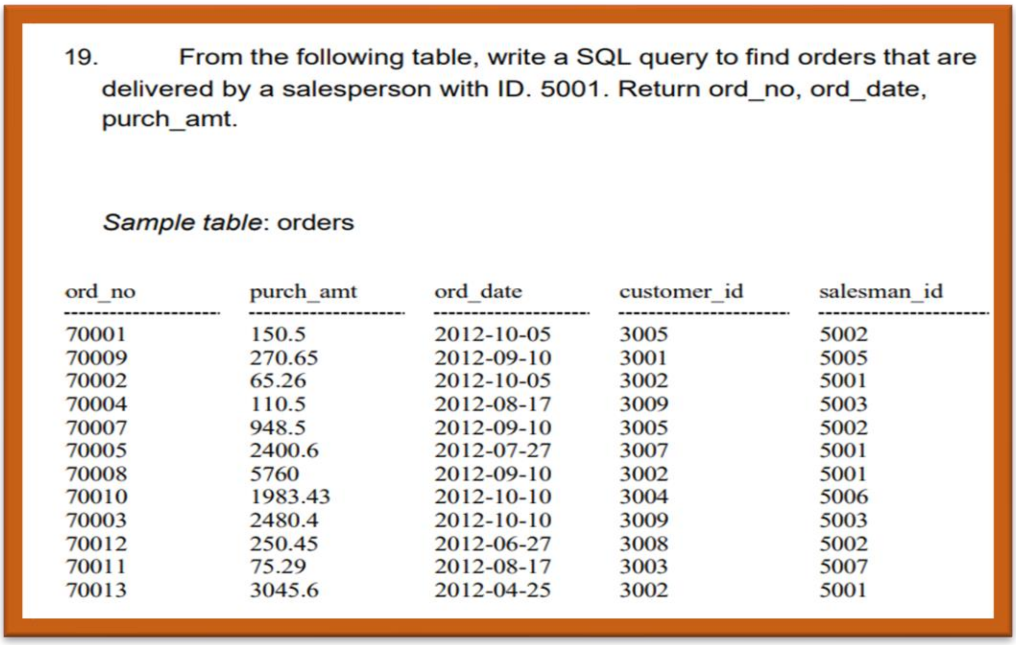
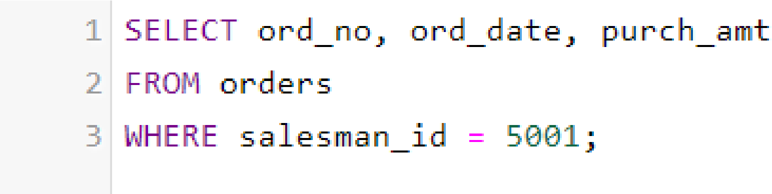


19. From the following table, write a SQL query to find orders that are delivered by a salesperson with ID. 5001. Return ord_no, ord_date, purch_amt.

Sample table: orders

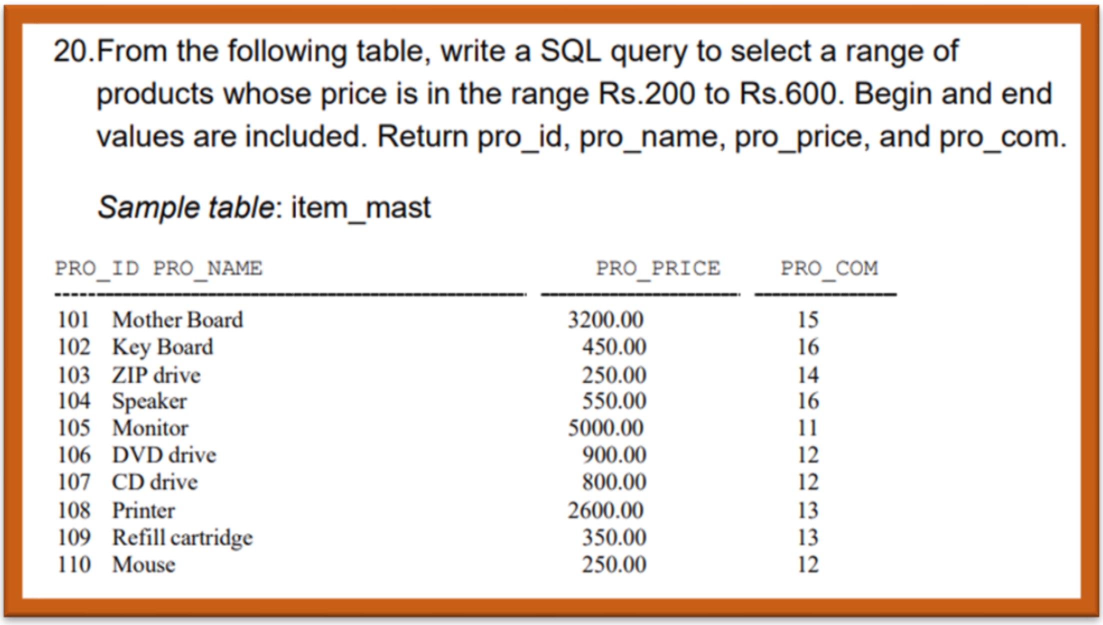
ord_no	purch_amt	ord_date	customer_id	salesman_id
70001	150.5	2012-10-05	3005	5002
70009	270.65	2012-09-10	3001	5005
70002	65.26	2012-10-05	3002	5001
70004	110.5	2012-08-17	3009	5003
70007	948.5	2012-09-10	3005	5002
70005	2400.6	2012-07-27	3007	5001
70008	5760	2012-09-10	3002	5001
70010	1983.43	2012-10-10	3004	5006
70003	2480.4	2012-10-10	3009	5003
70012	250.45	2012-06-27	3008	5002
70011	75.29	2012-08-17	3003	5007
70013	3045.6	2012-04-25	3002	5001

Answer



```sql
SELECT ord_no, ord_date, purch_amt
FROM orders
WHERE salesman_id = 5001;
```

20

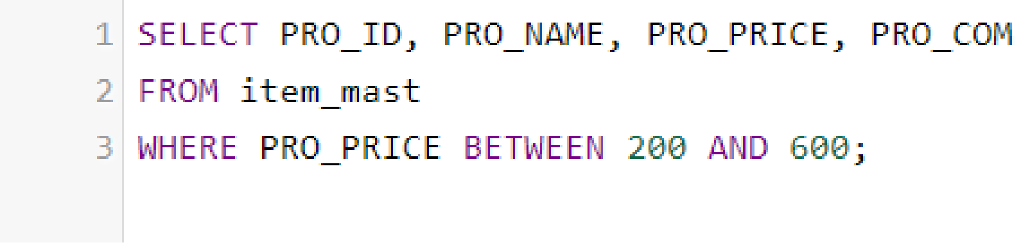


20.From the following table, write a SQL query to select a range of products whose price is in the range Rs.200 to Rs.600. Begin and end values are included. Return pro_id, pro_name, pro_price, and pro_com.

Sample table: item_mast

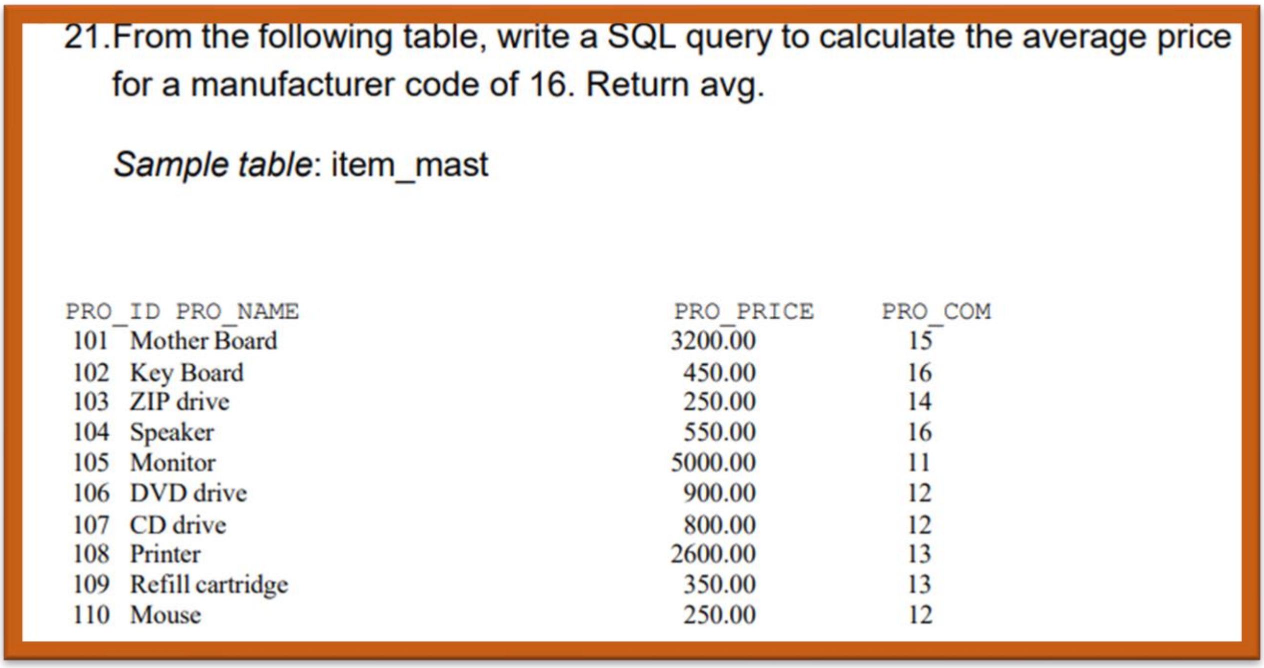
PRO_ID	PRO_NAME	PRO_PRICE	PRO_COM
101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11
106	DVD drive	900.00	12
107	CD drive	800.00	12
108	Printer	2600.00	13
109	Refill cartridge	350.00	13
110	Mouse	250.00	12

Answer



```
SELECT PRO_ID, PRO_NAME, PRO_PRICE, PRO_COM
FROM item_mast
WHERE PRO_PRICE BETWEEN 200 AND 600;
```

21

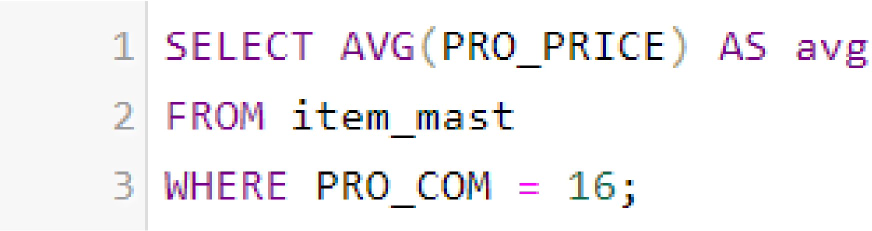


21.From the following table, write a SQL query to calculate the average price for a manufacturer code of 16. Return avg.

Sample table: item_mast

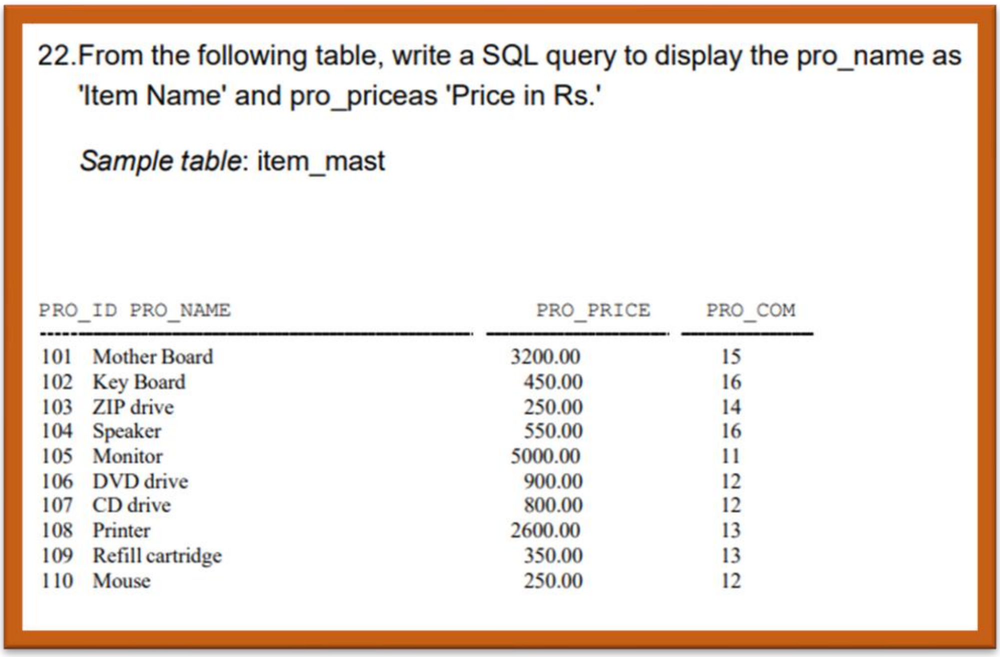
PRO_ID	PRO_NAME	PRO_PRICE	PRO_COM
101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11
106	DVD drive	900.00	12
107	CD drive	800.00	12
108	Printer	2600.00	13
109	Refill cartridge	350.00	13
110	Mouse	250.00	12

Answer



```
SELECT AVG(PRO_PRICE) AS avg
FROM item_mast
WHERE PRO_COM = 16;
```

22

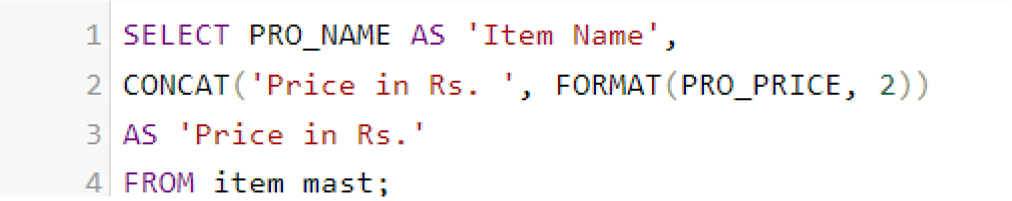


22.From the following table, write a SQL query to display the pro_name as 'Item Name' and pro_priceas 'Price in Rs.'

Sample table: item_mast

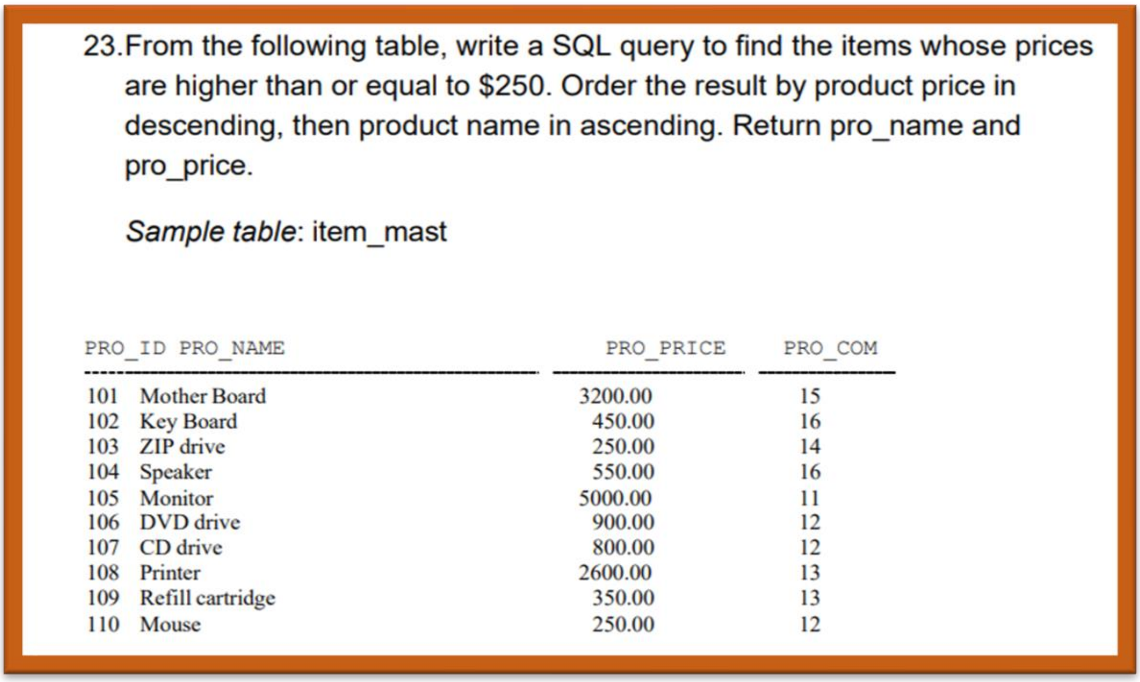
PRO_ID	PRO_NAME	PRO_PRICE	PRO_COM
101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11
106	DVD drive	900.00	12
107	CD drive	800.00	12
108	Printer	2600.00	13
109	Refill cartridge	350.00	13
110	Mouse	250.00	12

Answer



```sql
SELECT PRO_NAME AS 'Item Name',
CONCAT('Price in Rs. ', FORMAT(PRO_PRICE, 2))
AS 'Price in Rs.'
FROM item_mast;
```

23

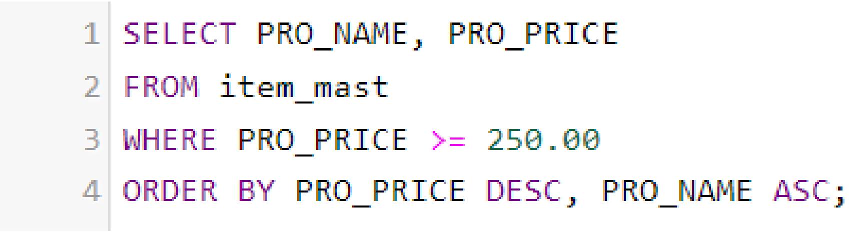


23.From the following table, write a SQL query to find the items whose prices are higher than or equal to $250. Order the result by product price in descending, then product name in ascending. Return pro_name and pro_price.

Sample table: item_mast

PRO_ID	PRO_NAME	PRO_PRICE	PRO_COM
101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11
106	DVD drive	900.00	12
107	CD drive	800.00	12
108	Printer	2600.00	13
109	Refill cartridge	350.00	13
110	Mouse	250.00	12

Answer



```sql
SELECT PRO_NAME, PRO_PRICE
FROM item_mast
WHERE PRO_PRICE >= 250.00
ORDER BY PRO_PRICE DESC, PRO_NAME ASC;
```