

```
=====
=====
1) Create two tables Student and Exam and link two tables through Primary Key
and Foreign Key.
=====
=====
```

```
CREATE TABLE Student
```

```
(
    Rollno int PRIMARY KEY,
    Name varchar(20),
    Branch varchar(20)
)
```

```
INSERT INTO student(Rollno, Name, Branch) VALUES(1, "Jay", "Computer Science");
INSERT INTO student(Rollno, Name, Branch) VALUES(2, "Suhani", "Electronic and Com");
INSERT INTO student(Rollno, Name, Branch) VALUES(3, "Kriti", "Electronic and Com");
```

```
CREATE TABLE Exam
```

```
(
    Rollno int,
    S_code varchar(20),
    Marks int,
    P_code varchar(20),

    FOREIGN KEY(Rollno) REFERENCES student(Rollno)
)
```

```
INSERT INTO exam(Rollno, S_code, Marks, P_code) VALUES(1, "CS11", 50, "CS");
INSERT INTO exam(Rollno, S_code, Marks, P_code) VALUES(1, "CS12", 60, "CS");
INSERT INTO exam(Rollno, S_code, Marks, P_code) VALUES(2, "EC101", 66, "EC");
INSERT INTO exam(Rollno, S_code, Marks, P_code) VALUES(2, "EC102", 70, "EC");
INSERT INTO exam(Rollno, S_code, Marks, P_code) VALUES(3, "EC101", 45, "EC");
INSERT INTO exam(Rollno, S_code, Marks, P_code) VALUES(3, "EC102", 50, "EC");
```

```
=====
=====
----> Create two tables Employee and Incentive and link two tables
=====
=====
```

```
CREATE TABLE Employee
```

```
(
    Employee_id int PRIMARY KEY,
    First_name varchar(20),
    Last_name varchar(20),
    Salary int,
    Joining_date date,
    Department varchar(20)
)
```

```
INSERT INTO
employee(Employee_id, First_name, Last_name, Salary, Joining_date, Department)
VALUES(1, "John", "Abraham", 1000000, "01-JAN-13 12.00.00 AM", "Banking");
```

```

INSERT INTO
employee(Employee_id, First_name, Last_name, Salary, Joining_date, Department)
VALUES(2, "Michael", "Clarke", 800000, "01-JAN-13 12.00.00 AM", "Insurance");
INSERT INTO
employee(Employee_id, First_name, Last_name, Salary, Joining_date, Department)
VALUES(3, "Roy", "Thomas", 700000, "01-FEB-13 12.00.00 AM", "Banking");
INSERT INTO
employee(Employee_id, First_name, Last_name, Salary, Joining_date, Department)
VALUES(4, "Tom", "Jose", 600000, "01-FEB-13 12.00.00 AM", "Insurance");
INSERT INTO
employee(Employee_id, First_name, Last_name, Salary, Joining_date, Department)
VALUES(5, "Jerry", "Pinto", 650000, "01-FEB-13 12.00.00 AM", "Insurance");
INSERT INTO
employee(Employee_id, First_name, Last_name, Salary, Joining_date, Department)
VALUES(6, "Philip", "Mathew", 750000, "01-JAN-13 12.00.00 AM", "Services");
INSERT INTO
employee(Employee_id, First_name, Last_name, Salary, Joining_date, Department)
VALUES(7, "TestName1", "123", 650000, "01-JAN-13 12.00.00 AM", "Services");
INSERT INTO
employee(Employee_id, First_name, Last_name, Salary, Joining_date, Department)
VALUES(8, "TestName2", "Lname%", 600000, "01-FEB-13 12.00.00 AM", "Insurance");

```

```

CREATE TABLE Incentive
(
    Employee_ref_id int,
    Incentive_date date,
    Incentive_amount int,

    FOREIGN KEY(Employee_ref_id) REFERENCES employee(Employee_id)
)

```

```

INSERT INTO incentive(Employee_ref_id, Incentive_date, Incentive_amount)
VALUES(1, "01-FEB-13", 5000);
INSERT INTO incentive(Employee_ref_id, Incentive_date, Incentive_amount)
VALUES(2, "01-FEB-13", 3000);
INSERT INTO incentive(Employee_ref_id, Incentive_date, Incentive_amount)
VALUES(3, "01-FEB-13", 4000);
INSERT INTO incentive(Employee_ref_id, Incentive_date, Incentive_amount)
VALUES(1, "01-JAN-13", 4500);
INSERT INTO incentive(Employee_ref_id, Incentive_date, Incentive_amount)
VALUES(2, "01-JAN-13", 3500);

```

2) Get First_Name from employee table using Tom name "Employee Name".

```
SELECT * FROM employee WHERE First_name="Tom"
```

3) Get FIRST_NAME, Joining Date, and Salary from employee table.

```
SELECT First_name, Joining_date, Salary FROM employee
```

4) Get all employee details from the employee table order by First_Name Ascending and Salary descending?

```
SELECT * FROM employee ORDER BY First_name ASC
```

```
SELECT * FROM employee ORDER BY Salary DESC
```

5) Get employee details from employee table whose first name contains 'J'.

```
SELECT * FROM employee WHERE First_name LIKE 'J%'
```

6) Get department wise maximum salary from employee table order by salary ascending?

```
SELECT * FROM employee ORDER BY Salary ASC
SELECT MAX(Salary), Department FROM employee WHERE Department="Banking"
SELECT MAX(Salary), Department FROM employee WHERE Department="Insurance"
SELECT MAX(Salary), Department FROM employee WHERE Department="Services"
```

7) Select first_name, incentive amount from employee and incentives table for those employees

who have incentives and incentive amount greater than 3000

```
SELECT employee.First_name, incentive.Incentive_amount FROM employee
INNER JOIN incentive ON employee.Employee_id=incentive.Employee_ref_id
```

```
SELECT * FROM incentive WHERE Incentive_amount>3000
```

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

```
CREATE TABLE viewtable
```

```
(
    id int,
    fname varchar(20),
    lname varchar(20),
    salary int,
    jdate date,
    department varchar(20),
    date_time timestamp,
    action_performed varchar(40)
)
```

```
===== TRIGGER START
=====
```

```
DELIMITER $$
```

```
CREATE TRIGGER insert_trigger AFTER INSERT ON employee FOR EACH ROW
BEGIN
    INSERT INTO viewtable(id, fname, lname, salary, jdate, department,
action_performed)
    VALUES(new.Employee_id, new.First_name, new.Last_name, new.Salary,
new.Joining_date, new.Department, "Record Inserted!");
END
```

```
===== TRIGGER END
```

=====

=====

-----> Create table given below: Salesperson and Customer

=====

=====

```
CREATE TABLE Salesperson
(
    SNo int PRIMARY KEY,
    SNAME varchar(20),
    CITY varchar(20),
    COMM float
)
```

```
INSERT INTO salesperson(SNo, SNAME, CITY, COMM) VALUES(1001, "Peel ", "London", 0.12);
INSERT INTO salesperson(SNo, SNAME, CITY, COMM) VALUES(1002, "Serres", "San
Jose", 0.13);
INSERT INTO salesperson(SNo, SNAME, CITY, COMM)
VALUES(1004, "Moti ka", "London", 0.11);
INSERT INTO salesperson(SNo, SNAME, CITY, COMM)
VALUES(1007, "Rafki n", "Barcel ona", 0.15);
INSERT INTO salesperson(SNo, SNAME, CITY, COMM) VALUES(1003, "Axel rod", "New
York", 0.1);
```

```
CREATE TABLE Customer
(
    CNM int PRIMARY KEY,
    CNAME varchar(20),
    CITY varchar(20),
    RATING int,
    SNo int,
    FOREIGN KEY(SNo) REFERENCES salesperson(SNo)
)
```

```
INSERT INTO customer(CNM, CNAME, CITY, RATING, SNo)
VALUES(201, "Hoffman", "London", 100, 1001);
INSERT INTO customer(CNM, CNAME, CITY, RATING, SNo)
VALUES(202, "Gi ovanne", "Roe", 200, 1003);
INSERT INTO customer(CNM, CNAME, CITY, RATING, SNo) VALUES(203, "Li u", "San
Jose", 300, 1002);
INSERT INTO customer(CNM, CNAME, CITY, RATING, SNo)
VALUES(204, "Grass", "Barcel ona", 100, 1002);
INSERT INTO customer(CNM, CNAME, CITY, RATING, SNo)
VALUES(206, "Ci emens", "London", 300, 1007);
INSERT INTO customer(CNM, CNAME, CITY, RATING, SNo)
VALUES(207, "Perei ra", "Roe", 100, 1004);
```

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

```
SELECT SNAME, CITY FROM salesperson WHERE CITY='London' AND COMM > 0.12;
```

10) All salespeople either in Barcelona or in London

```
SELECT SNAME FROM salesperson WHERE CITY="London" OR "Barcelona"
```

11) All salespeople with commission between 0.10 and 0.12. (Boundary values should be excluded).

```
SELECT SNAME, COMM FROM salesperson WHERE COMM BETWEEN 0.10 AND 0.12
```

12) All customers excluding those with rating <= 100 unless they are located in Rome.

```
SELECT * FROM customers WHERE RATING>100 OR CITY='Rome';
```

13) Write a SQL statement that displays all the information about all salespeople

```
SELECT * FROM salesperson
```

```
=====
-----> Create table given below: salesman and orders
=====
```

```
CREATE TABLE salesman
```

```
(
    salesman_id int PRIMARY KEY,
    name varchar(20),
    city varchar(20),
    commission float
)
```

```
INSERT INTO salesman(salesman_id, name, city, commission) VALUES(5001, "James Hoog", "New York", 0.15);
```

```
INSERT INTO salesman(salesman_id, name, city, commission) VALUES(5002, "Nail Knite", "Paris", 0.13);
```

```
INSERT INTO salesman(salesman_id, name, city, commission) VALUES(5005, "Pit Alex", "London", 0.11);
```

```
INSERT INTO salesman(salesman_id, name, city, commission) VALUES(5006, "Mc Lyon", "Paris", 0.14);
```

```
INSERT INTO salesman(salesman_id, name, city, commission) VALUES(5007, "Paul Adam", "Rome", 0.13);
```

```
INSERT INTO salesman(salesman_id, name, city, commission) VALUES(5003, "Lauson Hen", "San Jose", 0.12);
```

```
CREATE TABLE orders
```

```
(
    ord_no int PRIMARY KEY,
    purch_amt int,
    ord_date date,
    customer_id int,
    salesman_id int,
    FOREIGN KEY(salesman_id) REFERENCES salesman(salesman_id)
)
```

)

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

14) All orders for more than \$1000.

```
SELECT * FROM orders WHERE purch_amt>1000;
```

15) 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.

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

```
=====
----> Create table item_mast
=====
```

```
CREATE TABLE item_mast
(
    PRO_ID int PRIMARY KEY,
    PRO_NAME varchar(40),
    PRO_PRICE float,
    PRO_COM int
)
```

```
===== PROCEDURE START
=====
```

```
DELIMITER $$
```

```
CREATE PROCEDURE insert_data(i int, j varchar(40), k float, l int)
BEGIN
    INSERT INTO item_mast(PRO_ID, PRO_NAME, PRO_PRICE, PRO_COM)
VALUES(i, j, k, l);
END
```

```
CALL insert_data(101, "Mother Board", 3200.00, 15);
CALL insert_data(102, "Key Board", 450.00, 16);
CALL insert_data(103, "Zip Drive", 250.00, 14);
CALL insert_data(104, "Speaker", 550.00, 16);
CALL insert_data(105, "Monitor", 5000.00, 11);
CALL insert_data(106, "DVD drive", 900.00, 12);
CALL insert_data(107, "CD drive", 800.00, 12);
CALL insert_data(108, "Printer", 2600.00, 13);
CALL insert_data(109, "Refill Cartridge", 350.00, 13);
CALL insert_data(110, "Mouse", 250.00, 12);
```

```
===== PROCEDURE END
=====
```

16) 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.

```
SELECT * FROM item_mast WHERE PRO_PRICE BETWEEN 200 AND 600
```

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

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

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

```
SELECT PRO_NAME AS Item_Name, PRO_PRICE AS Price_in_Rs FROM item_mast
```

19) 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.

```
SELECT PRO_NAME, PRO_PRICE FROM item_mast WHERE PRO_PRICE >= 250
```

```
SELECT PRO_NAME FROM item_mast ORDER BY PRO_NAME ASC
SELECT PRO_PRICE FROM item_mast ORDER BY PRO_PRICE DESC
```

20) From the following table, write a SQL query to calculate average price of the items for each company. Return average price and company code.

```
SELECT AVG(PRO_PRICE), PRO_COM FROM item_mast WHERE PRO_COM=11
```

```
SELECT AVG(PRO_PRICE), PRO_COM FROM item_mast WHERE PRO_COM=12
SELECT AVG(PRO_PRICE), PRO_COM FROM item_mast WHERE PRO_COM=13
SELECT AVG(PRO_PRICE), PRO_COM FROM item_mast WHERE PRO_COM=14
SELECT AVG(PRO_PRICE), PRO_COM FROM item_mast WHERE PRO_COM=15
SELECT AVG(PRO_PRICE), PRO_COM FROM item_mast WHERE PRO_COM=16
```