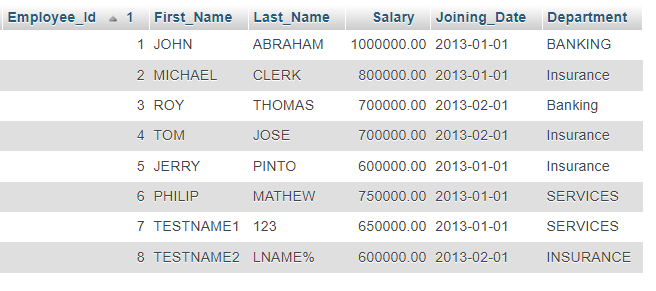
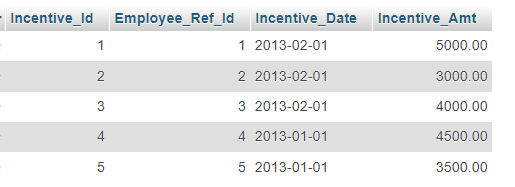
**TOPIC – SQL**

Task – 1

**TABLE: - Employee**



**TABLE :- Incentives**



* **Questions & Answers**

a) Get First Name from employee table using alias name “Employee Name”.

=> [SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) `First\_Name`as 'Employee Name' FROM `employee`;

b) Get FIRST\_NAME, joining year, Joining Month and Joining Date from employee table.

=>[Select](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) First\_Name, year(Joining\_Date) JoinYear , month(Joining\_Date), day(Joining\_Date) from employee;

c) Get all employee details from the employee table order by First Name Ascending And Salary descending?

=> SELECT \* FROM ‘employee’ ORDER BY ‘First Name’ ASC, ‘Salary’ DESC;

d) Get employee details from employee table whose first name contains „o‟.

=> [SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) \* FROM employee WHERE First Name [LIKE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/string-comparison-functions.html%23operator_like) 'O';

e) Get employee details from employee table whose joining month is “January”.

=>[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) \* FROM employee WHERE Joining Date [LIKE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/string-comparison-functions.html%23operator_like) 'January';

f) Get department, total salary with respect to a department from employee table Order By total salary descending.

=> [SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) Department, [SUM](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/aggregate-functions.html%23function_sum)(Salary) AS TotalSalary FROM employee GROUP BY Department ORDER BY Salary DESC;

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

=>[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) Department, [MAX](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/aggregate-functions.html%23function_max)(Salary) AS MaxSalary FROM Employee GROUP BY Department ORDER BY MaxSalary ASC;

h) Select first name, incentive amount from employee and incentives table for those Employees who have incentives and incentive amount greater than 3000

=>[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) First\_Name,Incentive\_Amt FROM employee emp INNER JOIN Incentives INC ON emp.Employee\_Id = Inc.Employee\_Ref\_Id [AND](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_and) Incentive\_Amt> 3000;

i) Select 2nd Highest salary from employee table.

=>[Select](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) [Max](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/aggregate-functions.html%23function_max)(Salary) as Salary from employee where Salary <([select](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) [MAX](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/aggregate-functions.html%23function_max)(Salary) from employee);

j) Select first name, incentive amount from employee and incentives table for all Employees who got incentives using left join.

=>[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) First\_Name,NVL(Incentive\_Amt,0) FROM employee A [RIGHT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/string-functions.html%23function_right) JOIN Incentives B ON A.Employee\_Id=B.Employee\_Ref\_Id;

k) Create View OF Employee table in which store first name, last name and salary only.

=>[CREATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-view.html) [VIEW](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-view.html) Employee\_View AS [SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) Employee\_Id, First\_Name, Last\_Name , Salary FROM Employee;

l) Create Procedure to find out department wise highest salary.

=> CREATE PROCEDURE Find\_Department\_Highest\_Salary()

BEGIN

DECLARE done INT DEFAULT FALSE;

DECLARE Department\_id INT;

DECLARE Max\_Salary DECIMAL(10, 2);

m) Create after Insert trigger on Employee table which insert records in view table.

=> CREATE TRIGGER AfterEmployeeInsert

AFTER INSERT ON Employee

FOR EACH ROW

BEGIN

-- Inserting into the EmployeeView table

INSERT INTO EmployeeView (Employee\_ID, First\_Name, Last\_Name, Department)

VALUES (NEW.EmployeeID, NEW.FirstName, NEW.LastName, NEW.Department);

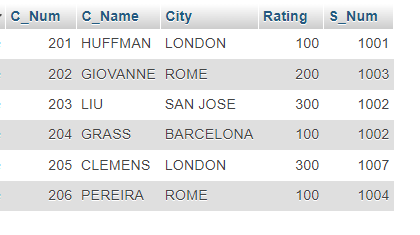
END;

Task – 2

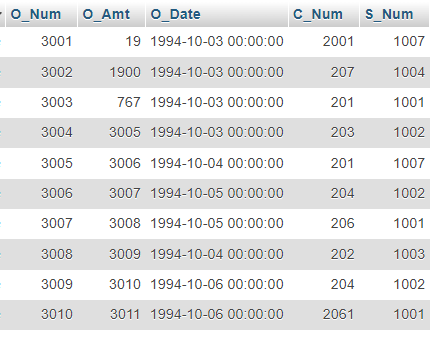
**TABLE :- Sales Person**

****

**TABLE :- Customer**



**TABLE: - Order**



a) All orders for more than $1000.

=> [SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) \* FROM `order` WHERE O\_Amt>1000;

b) Names and cities of all salespeople in London with commission above 0.10.

=>[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) S\_Name , City FROM `sales\_person` WHERE Comm > 0.10 [AND](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_and) City ='LONDON';

c) All salespeople either in Barcelona or in London.

=>[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) S\_Name , City FROM `sales\_person` WHERE City [IN](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/comparison-operators.html%23function_in) ('BARCELONA','LONDON');

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

=>[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) S\_Name , Comm FROM `sales\_person` WHERE Comm > 0.10 [AND](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_and) Comm < 0.12;

e) All customers with NULL values in city column.

=> [SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) C\_Name FROM `customer` WHERE City [IS](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/comparison-operators.html%23operator_is) NULL;

f) All orders taken on Oct 3Rd and Oct 4th 1994.

=> [SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) \* FROM `order` WHERE O\_Date [IN](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/comparison-operators.html%23function_in) ('03-10-1994','04-10-1994');

g) All customers serviced by peel or Motika.

=> [SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) \* FROM customer WHERE S\_Num = 1001 [OR](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_or) S\_Num = 1004;

h) All customers whose names begin with a letter from A to B

=>[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) C\_Name FROM `customer` WHERE C\_Name [LIKE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/string-comparison-functions.html%23operator_like) 'A%' [OR](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_or) C\_Name [LIKE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/string-comparison-functions.html%23operator_like) 'B%';

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

=> [SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) C\_Name FROM `customer` WHERE Rating <= 100 [OR](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_or) City = 'ROME';

j) All orders except those with 0 or NULL value in amt field.

=> [SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) O\_Num FROM `order` WHERE O\_Amt != 0 [OR](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_or) O\_Amt [IS](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/comparison-operators.html%23operator_is) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_not) NULL;

k) Count the number of salespeople currently listing orders in the order table.

=> SELECT COUNT(DISTINCT S\_Num) AS num\_active\_sales\_person

FROM `order`

WHERE order\_status = 'Active';