Topic – SQL Task-1

**Create Employee Table and Incentives Table**

**Table: - Employee**

CREATE TABLE Employee (em\_id int PRIMARY KEY AUTO\_INCREMENT,first\_name varchar(150),last\_name varchar(150),salary int,joining\_date date,department varchar(150));

INSERT INTO `employee` (`em\_id`, `first\_name`, `last\_name`, `salary`, `joining\_date`, `department`) VALUES (NULL, 'Jhon', 'Abraham', '1000000', '2013-01-01', 'Banking'), (NULL, 'Michael', 'Clerk', '800000', '2013-01-01', 'Insurance'), (NULL, 'Roy', 'Thomas', '700000', '2013-02-01', 'Banking'), (NULL, 'Tom', 'Jose', '600000', '2013-02-01', 'Insurance'), (NULL, 'Jerry', 'Pinto', '650000', '2013-01-01', 'Insurance'), (NULL, 'Philip', 'Mathew', '750000', '2013-01-01', 'Services'), (NULL, 'Testname1', '123', '650000', '2013-01-01', 'services'), (NULL, 'Testname2', 'Lname%', '600000', '2013-02-01', 'Insurance');

**Table: - Incentives**

CREATE TABLE incentives (insentive\_id int PRIMARY KEY AUTO\_INCREMENT,employee\_ref\_id int,FOREIGN KEY (employee\_ref\_id) REFERENCES employee(em\_id),incentive\_date date,incentive\_amt int)

1. **Get First\_Name from employee table using alias name “Employee Name”.**

select first\_name as 'Employee Name' from employee;

1. **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) AS 'Joining Year',month(joining\_date) AS 'Joining Month',day(joining\_date) AS 'Joining Date' from employee;

1. **Get all employee details from the employee table order by First Name Ascending And Salary descending?**

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) \* FROM `employee` ORDER BY `employee`.`salary` DESC,`employee`.`first\_name` ASC;

1. **Get employee details from employee table whose first name contains „o‟.**

select \* from employee where first\_name LIKE='O%'

1. **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 month(joining\_date)=1;

1. **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 'Total salary' from employee GROUP BY department;

1. **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,[sum](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/aggregate-functions.html%23function_sum)(salary) as 'Total Salary' from employee group by department order by `Total Salary` asc;

1. **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) employee.first\_name,incentives.incentive\_amt from employee JOIN incentives on employee.em\_id = incentives.employee\_ref\_id WHERE incentives.incentive\_amt>3000;

1. **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) \* from employee order by salary DESC limit 1 OFFSET 1;

1. **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) employee.first\_name,incentives.incentive\_amt from employee JOIN incentives ON employee.em\_id=incentives.employee\_ref\_id;

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

[select](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) first\_name as 'First Name',last\_name as 'Last Name',salary as 'Salary' from employee;

1. **Create Procedure to find out department wise highest salary.**

create PROCEDURE highest\_salary ()

BEGIN

select \* from employee group by department order by salary DESC;

END

[call](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/call.html) highest\_salary;

1. **Create after Insert trigger on Employee table which insert records in view table.**

[create](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-trigger.html) [trigger](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-trigger.html) after\_insert after [insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) ON employee for each ROW BEGIN [INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into viewtable [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values)(new.em\_id,new.first\_name,new.last\_name,new.salary,new.joining\_date,new.department,now()); end;

Task - 2

Create Table Sales Person, Customer and Order

**Table: - Sales Person**

[create](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) [table](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) sales\_person(sno int primary key AUTO\_INCREMENT,sname varchar (100),city varchar(100),comm int);

**Table: - Customer**

[CREATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) [TABLE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) customer(cnm int PRIMARY key AUTO\_INCREMENT,cname varchar(100),city varchar(100),rating int,sno int,FOREIGN key (sno) REFERENCES sales\_person(sno));

**Table: - Orders**

[create](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) [table](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) orders(onm int PRIMARY KEY AUTO\_INCREMENT,amt int,ode date,cnm int,sno int,FOREIGN key(cnm) REFERENCES customer(cnm),FOREIGN key(sno) REFERENCES sales\_person(sno));

1. **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 orders where amt >1000;

1. **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) sname,city from sales\_person where city='London' [and](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_and) comm>0.10;

1. **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) sname,city from sales\_person where city='London' [or](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_or) city='Barcelona';

1. **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) \* FROM `sales\_person` WHERE comm BETWEEN 0.10 [AND](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_and) 0.12;

1. **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) \* 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;

1. **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 `orders` WHERE ode [in](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/comparison-operators.html%23function_in)('1994-10-03','1994-10-04');

1. **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) customer.\*,sales\_person.sname from sales\_person join customer on customer.sno = sales\_person.sno where sname [in](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/comparison-operators.html%23function_in)('Peel','Motika');

1. **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) \* FROM `customer` WHERE cname [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) cname [LIKE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/string-comparison-functions.html%23operator_like) 'B%';

1. **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) cname, city, rating 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';

1. **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) \* from orders where amt !=0 [or](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_or) 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;

1. **Count the number of salespeople currently listing orders in the order table.**

[select](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) [count](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/aggregate-functions.html%23function_count)(DISTINCT sno) from orders;