CREATE DATABASE ORG123;

SHOW DATABASES;

USE ORG123;

CREATE TABLE Worker (

WORKER\_ID INT NOT NULL PRIMARY KEY AUTO\_INCREMENT,

FIRST\_NAME CHAR(25),

LAST\_NAME CHAR(25),

SALARY INT(15),

JOINING\_DATE DATETIME,

DEPARTMENT CHAR(25)

);

INSERT INTO Worker

(WORKER\_ID, FIRST\_NAME, LAST\_NAME, SALARY, JOINING\_DATE, DEPARTMENT) VALUES

(001, 'Monika', 'Arora', 100000, '14-02-20 09.00.00', 'HR'),

(002, 'Niharika', 'Verma', 80000, '14-06-11 09.00.00', 'Admin'),

(003, 'Vishal', 'Singhal', 300000, '14-02-20 09.00.00', 'HR'),

(004, 'Amitabh', 'Singh', 500000, '14-02-20 09.00.00', 'Admin'),

(005, 'Vivek', 'Bhati', 500000, '14-06-11 09.00.00', 'Admin'),

(006, 'Vipul', 'Diwan', 200000, '14-06-11 09.00.00', 'Account'),

(007, 'Satish', 'Kumar', 75000, '14-01-20 09.00.00', 'Account'),

(008, 'Geetika', 'Chauhan', 90000, '14-04-11 09.00.00', 'Admin');

CREATE TABLE Bonus (

WORKER\_REF\_ID INT,

BONUS\_AMOUNT INT(10),

BONUS\_DATE DATETIME,

FOREIGN KEY (WORKER\_REF\_ID)

REFERENCES Worker(WORKER\_ID)

ON DELETE CASCADE

);

INSERT INTO Bonus

(WORKER\_REF\_ID, BONUS\_AMOUNT, BONUS\_DATE) VALUES

(001, 5000, '16-02-20'),

(002, 3000, '16-06-11'),

(003, 4000, '16-02-20'),

(001, 4500, '16-02-20'),

(002, 3500, '16-06-11');

CREATE TABLE Title (

WORKER\_REF\_ID INT,

WORKER\_TITLE CHAR(25),

AFFECTED\_FROM DATETIME,

FOREIGN KEY (WORKER\_REF\_ID)

REFERENCES Worker(WORKER\_ID)

ON DELETE CASCADE

);

INSERT INTO Title

(WORKER\_REF\_ID, WORKER\_TITLE, AFFECTED\_FROM) VALUES

(001, 'Manager', '2016-02-20 00:00:00'),

(002, 'Executive', '2016-06-11 00:00:00'),

(008, 'Executive', '2016-06-11 00:00:00'),

(005, 'Manager', '2016-06-11 00:00:00'),

(004, 'Asst. Manager', '2016-06-11 00:00:00'),

(007, 'Executive', '2016-06-11 00:00:00'),

(006, 'Lead', '2016-06-11 00:00:00'),

(003, 'Lead', '2016-06-11 00:00:00');

drop table worker;

# 1.Write an SQL query to fetch unique values of DEPARTMENT from Worker table. #

select distinct department from worker;

# 2.Write an SQL query to print all Worker details from the Worker table order by FIRST\_NAME Ascending and DEPARTMENT Descending #

select \* from worker order by first\_name asc, department desc ;

# 3. Write an SQL query to print details of the Workers whose FIRST\_NAME contains ‘a’ #

select \* from worker where first\_name like '%a%';

# 4. Write an SQL query to print details of the Workers whose FIRST\_NAME ends with ‘h’ and contains six alphabets #

select \* from worker where first\_name like '\_\_\_\_\_h' and char\_length(first\_name) = 6;

# 5. Write an SQL query to print details of the Workers whose SALARY lies between 100000 and 500000 #

select \* from worker where salary between 100000 and 500000 ;

# 6. Write an SQL query to print details of the Workers who have joined in Feb’2014. #

select \* from worker where JOINING\_DATE between '2014-02-01' and '2014-02-28 23:59:59';

# 7. Write an SQL query to fetch the count of employees working in the department ‘Admin’ #

SELECT DEPARTMENT, COUNT(\*) AS Employee\_Count FROM Worker GROUP BY DEPARTMENT HAVING DEPARTMENT = 'Admin';

# 8. Write an SQL query to fetch worker names with salaries >= 50000 and <= 100000. #

SELECT FIRST\_NAME, LAST\_NAME FROM Worker WHERE SALARY >= 50000 AND SALARY <= 100000;

# 9. Write an SQL query to fetch the no. of workers for each department in the descending order #

SELECT DEPARTMENT, COUNT(\*) AS Number\_of\_Workers FROM Worker GROUP BY DEPARTMENT ORDER BY Number\_of\_Workers DESC;

# 10. Write an SQL query to print details of the Workers who are also Manager #

SELECT \* FROM Worker WHERE WORKER\_ID IN (

SELECT WORKER\_REF\_ID

FROM Title WHERE WORKER\_TITLE = 'Manager'

);

# 11. Write an SQL query to determine the 2nd lowest salary without using TOP or limit method. #

SELECT MIN(SALARY) AS Second\_Lowest\_Salary

FROM Worker

WHERE SALARY > (

SELECT MIN(SALARY)

FROM Worker);

# 12. Write an SQL query to fetch the list of employees with the same salary #

SELECT w.WORKER\_ID, w.FIRST\_NAME, w.LAST\_NAME, w.SALARY

FROM Worker w WHERE w.SALARY IN (

SELECT SALARY FROM Worker GROUP BY SALARY HAVING COUNT(\*) > 1)

ORDER BY w.SALARY, w.WORKER\_ID;

# 13. Write an SQL query to show the second highest salary from a table #

SELECT MAX(SALARY) AS Second\_Highest\_Salary

FROM Worker WHERE SALARY < (SELECT MAX(SALARY) FROM Worker);

# 14. Write an SQL query to show one row twice in results from a table. #

select \* from worker where worker\_id = 1 union all select \* from worker where worker\_id = 1;

# 15. Write an SQL query to fetch the first 50% records from a table. #

select \* from Worker order by WORKER\_ID limit 4;

# 16. Write an SQL query to fetch the departments that have less than three people in it. #

select department, count(\*) as employee\_count from worker group by department having count(\*) < 3;

# 17. Write an SQL query to show all departments along with the number of people in there. #

select department, count(\*) as number\_of\_employees from worker group by department order by number\_of\_employees desc ;

# 18. Write an SQL query to fetch the last five records from a table. #

select \* from worker order by worker\_id desc limit 5;

# 19.Write an SQL query to print the name of employees having the highest salary in each department #

select w.department, w.first\_name, w.last\_name,w.salary from worker w

join(select department ,max(salary) as maxsalary from worker group by department)

dept\_max on w.department = dept\_max.department and w.salary = dept\_max.salary

order by w.department;

# 20. Write an SQL query to fetch three max salaries from a table. #

select distinct salary from worker order by salary desc limit 3;

# 21. Write an SQL query to print the name of employees having the lowest salary in accunt and admin department. #

select w.first\_name, w.last\_name from worker w where w.salary = (

select min(SALARY) from worker where department = w.department)

and w.DEPARTMENT in ('account', 'admin');