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');

select \* from worker;

select \* from bonus;

select \* from title;

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

select distinct department from worker;

# Question 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;

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

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

# Question 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';

# Question 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;

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

select \* from worker where monthname(joining\_date)='February' and year(joining\_date)='2014';

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

select count(\*) from worker where department='Admin';

# Question 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;

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

select department, count(\*) as worker\_count from Worker group by department order by worker\_count desc;

# Question 10 - Write an SQL query to print details of the Workers who are also Managers

select worker.\* from worker join title on worker.worker\_id = title.worker\_ref\_id where title.worker\_title = 'Manager';

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

select min(salary) as secondlowestsalary from worker where salary > (select min(salary) from worker);

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

select \* from worker where salary in (select salary from worker group by salary having count(\*) > 1) order by salary;

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

select max(salary) as SecondHighestSalary from worker where salary < (select max(salary) from worker);

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

select \* from worker where worker\_id=001 union all select \* from worker where worker\_id=001;

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

select w1.\* from worker w1 where (select count(\*) from worker w2 where w2.worker\_id <= w1.worker\_id) <= (select floor(count(\*) / 2) from worker) order by w1.worker\_id;

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

select department from worker group by department having count(\*)<3;

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

select department, count(\*) from worker group by department;

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

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

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

select first\_name, last\_name, department, salary from worker w where salary = ( select max(salary) from worker where department = w.department );

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

select distinct w1.salary from worker w1 where 2 >= ( select count(distinct w2.salary) from worker w2 where w2.salary > w1.salary) order by w1.salary desc;

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

select first\_name, last\_name from worker w where department in ('account', 'admin') and salary = ( select min(salary) from worker where department = w.department);