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 title;

select \* from bonus;

-- TEST QUESTIONS

#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,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";

#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 month(joining\_date) = 2 and year(joining\_date) = 2014;

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

select count(\*) from worker where 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 count(\*) from worker group by department order by count(department) desc;

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

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

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

select salary as secondLowestSal from worker where salary = (select min(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 w1.worker\_id,w1.first\_name,w1.last\_name,w1.salary,w1.joining\_date,w1.department from worker w1,worker w2 where w1.first\_name != w2.first\_name and w1.last\_name != w2.last\_name and w1.salary = w2.salary;

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

select salary from worker where salary = (select max(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

union all

select \* from worker order by first\_name;

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

select \* from worker where worker\_id <= (select count(\*) from worker)/2;

#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(department) < 3;

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

select department,count(department) as members from worker group by department;

#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 worker.first\_name,worker.last\_name,worker.salary,worker.department from worker join (select department,max(salary) as maxsal from worker group by department) as salTable on worker.department = salTable.department and worker.salary = salTable.maxsal;

#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 worker.first\_name,worker.last\_name from worker join (select department,min(salary) as minsal from worker where department in ("admin","account") group by department) as minTable on (minTable.department = worker.department) and worker.salary = minTable.minsal;