DROP DATABASE ORG123;

CREATE DATABASE ORG123;

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');

#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 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 YEAR(JOINING\_DATE) = 2014 and MONTH(JOINING\_DATE) = 2;

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

select DEPARTMENT, COUNT(\*) as EmployeeCount from Worker group by DEPARTMENT;

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

select FIRST\_NAME, LAST\_NAME from Worker where SALARY between 50000 and 100000;

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

select DEPARTMENT, Count(\*) as WorkerCount from Worker group by DEPARTMENT Order by WorkerCount DESC;

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

select W.\* from Worker W join Title T on W.WORKER\_ID = T.WORKER\_REF\_ID where T.WORKER\_TITLE = 'Manager';

#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 not in (select MIN(SALARY) from Worker);

#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;

#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

);

#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 (SELECT FLOOR(COUNT(\*) / 2) from Worker);

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

select DEPARTMENT, COUNT(\*) as EmployeeCount 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 EmployeeCount

from Worker

group by DEPARTMENT;

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

select \*

from (

select \*

from Worker

order by WORKER\_ID DESC

LIMIT 5

) as LastFive

order by WORKER\_ID ASC;

#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

);

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

#select \* from Worker where SALARY in (select DISTINCT SALARY from Worker order by SALARY DESC LIMIT 3) order by SALARY DESC;

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 account and admin department.

select FIRST\_NAME, LAST\_NAME, DEPARTMENT, SALARY

from Worker W

where DEPARTMENT IN ('Account', 'Admin')

and SALARY = (

select MIN(SALARY)

from Worker

where DEPARTMENT = W.DEPARTMENT

);