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,

JOINING\_DATE DATETIME,

DEPARTMENT CHAR(25)

);

INSERT INTO Worker

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

(001, 'Monika', 'Arora', 100000, '2014-02-20 09:00:00', 'HR'),

(002, 'Niharika', 'Verma', 80000, '2014-06-11 09:00:00', 'Admin'),

(003, 'Vishal', 'Singhal', 300000, '2014-02-20 09:00:00', 'HR'),

(004, 'Amitabh', 'Singh', 500000, '2014-02-20 09:00:00', 'Admin'),

(005, 'Vivek', 'Bhati', 500000, '2014-06-11 09:00:00', 'Admin'),

(006, 'Vipul', 'Diwan', 200000, '2014-06-11 09:00:00', 'Account'),

(007, 'Satish', 'Kumar', 75000, '2014-01-20 09:00:00', 'Account'),

(008, 'Geetika', 'Chauhan', 90000, '2014-04-11 09:00:00', 'Admin');

CREATE TABLE Bonus (

WORKER\_REF\_ID INT,

BONUS\_AMOUNT INT,

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, '2016-02-20 00:00:00'),

(002, 3000, '2016-06-11 00:00:00'),

(003, 4000, '2016-02-20 00:00:00'),

(001, 4500, '2016-02-20 00:00:00'),

(002, 3500, '2016-06-11 00:00:00');

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');

commit;

#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';

#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 >= '2014-02-01' AND JOINING\_DATE < '2014-03-01';

#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 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 worker\_count FROM Worker GROUP BY DEPARTMENT ORDER BY worker\_count 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 SALARY FROM Worker ORDER BY SALARY ASC LIMIT 1 OFFSET 1;

#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);

#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 UNION ALL SELECT \* FROM Worker LIMIT 1;

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

SELECT \* FROM Worker

ORDER BY WORKER\_ID

#LIMIT FLOOR((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(WORKER\_ID) < 3;

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

SELECT DEPARTMENT, COUNT(\*) AS NumOfWorkers 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 w.FIRST\_NAME, w.LAST\_NAME, w.DEPARTMENT, w.SALARY

FROM Worker w

JOIN (

SELECT DEPARTMENT, MAX(SALARY) AS MaxSalary

FROM Worker

GROUP BY DEPARTMENT

) AS dept\_max ON w.DEPARTMENT = dept\_max.DEPARTMENT AND w.SALARY = dept\_max.MaxSalary;

#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 FIRST\_NAME, LAST\_NAME FROM Worker WHERE DEPARTMENT IN ('Account', 'Admin') AND SALARY = (

SELECT MIN(SALARY)

FROM Worker

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

);