





Code To insert the data and all

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');

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 strftime('%m', JOINING\_DATE) = '02' AND strftime('%Y', 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 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 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 \*

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)

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

WHERE WORKER\_ID IN (

SELECT WORKER\_ID

FROM Worker

ORDER BY WORKER\_ID

LIMIT (SELECT COUNT(\*)/2 FROM Worker)

);

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

ans)SELECT DEPARTMENT

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 Worker\_Count

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 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 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

);