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MySQL Test

DROP DATABASE IF EXISTS testdb;

CREATE DATABASE testdb;

USE testdb;

CREATE TABLE Worker(

worker\_id int,

first\_name varchar(30),

last\_name varchar(30),

salary int,

joining\_date DATETIME,

Department varchar(30)

);

INSERT INTO Worker 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');

SELECT\*FROM Worker;

CREATE TABLE Bonus(

Worker\_ref\_id int,

Bonus\_date datetime,

Bonus\_amount int,

FOREIGN KEY (Worker\_ref\_id) REFERENCES Worker(worker\_id)

);

INSERT INTO Bonus Values(1,'2016-02-20 00:00:00',5000),(2,'2016-06-11 00:00:00',3000),(3,'2016-02-20 00:00:00',4000),(1,'2016-02-20 00:00:00',4500),(2,'2016-06-11 00:00:00',3500);

SELECT\*FROM Bonus;

CREATE TABLE Title(

Worker\_ref\_id int PRIMARY KEY,

Worker\_title varchar(30),

Affected\_from datetime

);

INSERT INTO Title VALUES(1,'Manager','2016-02-20 00:00:00'),(2,'Executive','2016-06-11 00:00:00'),(8,'Executive','2016-06-11 00:00:00'),(5,'Manager','2016-06-11 00:00:00'),(4,'Asst.Manager','2016-06-11 00:00:00'),(7,'Executive','2016-06-11 00:00:00'),(6,'Lead','2016-06-11 00:00:00'),(3,'Lead','2016-06-11 00:00:00');

SELECT\*FROM Title;

Q1 Write an SQL query to fetch unique values of DEPARTMENT from Worker table?

Ans1 SELECT DISTINCT Department FROM Worker;

Q2 Write an SQL query to print all Worker details from the Worker table order by FIRST\_NAME Ascending and DEPARTMENT Descending?

Ans2 SELECT \*FROM Worker ORDER BY first\_name ASC, Department DESC;

Q3 Write an SQL query to print details of the Workers whose FIRST\_NAME contains ‘a’?

Ans3 SELECT \* FROM Worker WHERE first\_name LIKE '%a%';

Q4 Write an SQL query to print details of the Workers whose FIRST\_NAME ends with ‘h’ and contains six alphabets

Ans4 SELECT \* FROM Worker WHERE first\_name LIKE '\_\_\_\_\_h';

Q5 Write an SQL query to print details of the Workers whose SALARY lies between 100000 and 500000 ?

Ans5 SELECT \* FROM Worker WHERE salary BETWEEN 100000 AND 500000;

Q6 Write an SQL query to print details of the Workers who have joined in Feb’2014?

Ans6 SELECT \* FROM Worker WHERE MONTH(joining\_date) = 2 AND YEAR(joining\_date) = 2014;

Q7 Write an SQL query to fetch the count of employees working in the department ‘Admin’?

Ans7 SELECT COUNT(\*) AS admin\_count FROM Worker WHERE Department = 'Admin';

Q8 Write an SQL query to fetch worker names with salaries >= 50000 and <= 100000?

Ans8 SELECT first\_name, last\_name FROM Worker WHERE salary BETWEEN 50000 AND 100000;

Q9 Write an SQL query to fetch the no. of workers for each department in the descending order?

Ans9 SELECT Department, COUNT(\*) AS worker\_count FROM Worker GROUP BY Department ORDER BY worker\_count DESC;

Q10 Write an SQL query to print details of the Workers who are also Managers?

Ans10 SELECT \* FROM Worker WHERE Department = 'Manager' OR Title = 'Manager';

Q11 Write an SQL query to determine the 2nd lowest salary without using TOP or limit method?

Ans11 SELECT MIN(salary) AS second\_lowest\_salary

FROM Worker

WHERE salary > (

SELECT MIN(salary) FROM Worker

);

Q12 Write an SQL query to fetch the list of employees with the same salary?

Ans12 SELECT \*

FROM Worker

WHERE salary IN (

SELECT salary

FROM Worker

GROUP BY salary

HAVING COUNT(\*) > 1

);

Q13 Write an SQL query to show the second highest salary from a table?

Ans13 SELECT MAX(salary) AS second\_highest\_salary

FROM Worker

WHERE salary < (

SELECT MAX(salary) FROM Worker

);

Q14 Write an SQL query to show one row twice in results from a table?

Ans14 SELECT \* FROM Worker WHERE worker\_id = 1

UNION ALL

SELECT \* FROM Worker WHERE worker\_id = 1;

Q15 Write an SQL query to fetch the first 50% records from a table?

Ans15 SELECT \*

FROM Worker

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

Q16. Write an SQL query to fetch the departments that have less than three people in it?

Ans16. SELECT Department

FROM Worker

GROUP BY Department

HAVING COUNT(\*) < 3;

Q17. Write an SQL query to show all departments along with the number of people in there?

Ans17. SELECT Department, COUNT(\*) AS number\_of\_workers

FROM Worker

GROUP BY Department;

Q18. Write an SQL query to fetch the last five records from a table?

Ans18 SELECT \*

FROM Worker

ORDER BY worker\_id DESC

LIMIT 5;

Q19. Write an SQL query to print the name of employees having the highest salary in each department?

Ans19. SELECT first\_name, last\_name, Department, salary

FROM Worker w

WHERE salary = (

SELECT MAX(salary)

FROM Worker

WHERE Department = w.Department

);

Q20. Write an SQL query to fetch three max salaries from a table?

Ans20. SELECT DISTINCT salary

FROM Worker

ORDER BY salary DESC

LIMIT 3;