MY SQL TEST

**Name : Umar Khan Reg No : 22BCE0501**

**Mail Id :** [**umar.khan2022@vitstudent.ac.in**](mailto:umar.khan2022@vitstudent.ac.in)

**CODE**

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');

/\* Que 1 :Write an SQL query to fetch unique values of DEPARTMENT from Worker table. \*/ SELECT DISTINCT DEPARTMENT FROM Worker;

/\* Que 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;

SELECT \* FROM Worker ORDER BY DEPARTMENT DESC;

/\* Que 3 :Write an SQL query to print details of the Workers whose FIRST\_NAME contains

‘a’\*/ SELECT \* FROM Worker WHERE FIRST\_NAME LIKE '%a%';

/\* Que 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';

/\* Que 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;

/\* Que 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;

/\* Que 7 :Write an SQL query to fetch the count of employees working in the department ‘Admin’\*/ SELECT COUNT(\*) AS Admin\_Employee\_Count FROM Worker WHERE DEPARTMENT = 'Admin';

/\* Que 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;

/\* Que 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;

/\* Que 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';

/\* Que 11 :Write an SQL query to determine the 2nd lowest salary without using TOP or limit method.\*/ SELECT MIN(SALARY) AS Second\_Lowest\_Salary FROM Worker WHERE SALARY > ( SELECT MIN(SALARY) FROM Worker );

/\* Que 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 );

/\* Que 13 :Write an SQL query to show the second highest salary from a table\*/ SELECT MAX(SALARY) AS Second\_Highest\_Salary FROM Worker WHERE SALARY < ( SELECT MAX(SALARY) FROM Worker );

/\* Que 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;

/\* Que 15 :Write an SQL query to fetch the first 50% records from a table.\*/ SELECT \* FROM ( SELECT *, ROW\_NUMBER() OVER (ORDER BY WORKER\_ID) AS rn, COUNT(*) OVER () AS

total\_rows FROM Worker ) AS sub WHERE rn <= total\_rows / 2;

SELECT DEPARTMENT FROM Worker GROUP BY DEPARTMENT HAVING COUNT(\*) < 3;

/\* Que 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(*) < 3;

/\* Que 17 :Write an SQL query to show all departments along with the number of people in there.*/ SELECT DEPARTMENT, COUNT(*) AS Number\_Of\_Workers FROM Worker GROUP BY DEPARTMENT;

/\* Que 18 : Write an SQL query to fetch the last five records from a table.\*/ SELECT \* FROM Worker ORDER BY WORKER\_ID DESC LIMIT 5;

/\* Que 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 Max\_Salary FROM Worker GROUP BY DEPARTMENT ) AS dept\_max ON w.DEPARTMENT = dept\_max.DEPARTMENT

AND w.SALARY = dept\_max.Max\_Salary;

/\* Que 20 :Write an SQL query to fetch three max salaries from a table.\*/ SELECT DISTINCT SALARY FROM Worker ORDER BY SALARY DESC LIMIT 3;

/\* Que 21 :Write an SQL query to print the name of employees having the lowest salary in accunt and admin department.\*/ SELECT w.FIRST\_NAME, w.LAST\_NAME, w.DEPARTMENT, w.SALARY FROM Worker w JOIN ( SELECT DEPARTMENT, MIN(SALARY)

AS Min\_Salary FROM Worker WHERE DEPARTMENT IN ('Account', 'Admin') GROUP BY DEPARTMENT ) AS dept\_min ON w.DEPARTMENT = dept\_min.DEPARTMENT AND

w.SALARY = dept\_min.Min\_Salary;