Prepare Sample Data To Practice SQL Skill.

Sample Table – Worker

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
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

Sample Table – Bonus

WORKER_REF_ID	BONUS_DATE	BONUS_AMOUNT
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

Sample Table – Title

WORKER_REF_ID	WORKER_TITLE	AFFECTED_FROM
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

To prepare the sample data, you can run the following queries in your database query executor or on the SQL command line. We've tested them with MySQL Server 5.7 and MySQL Workbench 6.3.8 query browser. You can also download these Softwares and install them to carry on the SQL exercise.

SQL Script to Seed Sample Data.

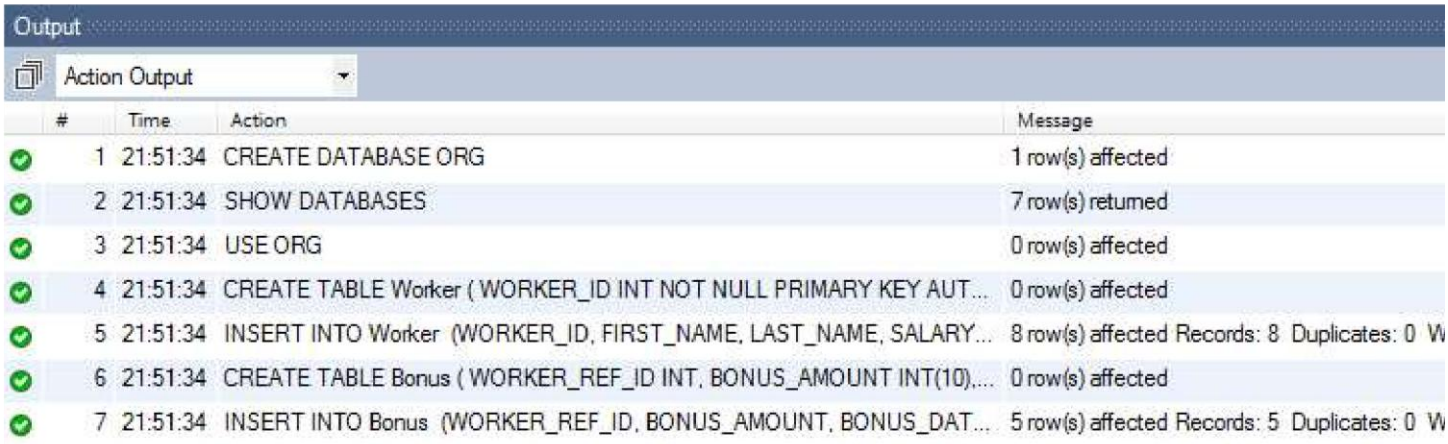
```
CREATE DATABASE ORG1;

SHOW DATABASES;

USE ORG1;


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');
```

Once above SQL would run, you'll see a result similar to the one attached below.



Creating Sample Data to Practice SQL Skill.

50 SQL Query Questions and Answers for Practice.

Q-1. Write an SQL query to fetch "FIRST_NAME" from Worker table using the alias name as <WORKER_NAME>.

Ans.
The required query is:

```
Select FIRST_NAME AS WORKER_NAME from Worker;
```

1. Write an SQL query to fetch "FIRST_NAME" from Worker table using the alias name as <WORKER NAME>.
2. Write an SQL query to fetch "FIRST_NAME" from Worker table in upper case.
3. Write an SQL query to fetch unique values of DEPARTMENT from Worker table.
4. Write an SQL query to print the first three characters of FIRST_NAME from Worker table.
5. Write an SQL query to find the position of the alphabet ('a') in the first name column 'Amitabh' from Worker table.
6. Write an SQL query to print the FIRST_NAME from Worker table after removing white spaces from the right side.
7. Write an SQL query to print the DEPARTMENT from Worker table after removing white spaces from the left side.
8. Write an SQL query that fetches the unique values of DEPARTMENT from Worker table and prints its length.
9. Write an SQL query to print the FIRST_NAME from Worker table after replacing 'a' with 'A'.
10. Write an SQL query to print the FIRST_NAME and LAST_NAME from Worker table into a single column COMPLETE_NAME. A space char should separate them.
11. Write an SQL query to print all Worker details from the Worker table order by FIRST_NAME Ascending.
12. Write an SQL query to print all Worker details from the Worker table order by FIRST_NAME Ascending and DEPARTMENT Descending.
13. Write an SQL query to print details for Workers with the first name as "Vipul" and "Satish" from Worker table.
14. Write an SQL query to print details of workers excluding first names, "Vipul" and "Satish" from Worker table.
15. Write an SQL query to print details of Workers with DEPARTMENT name as "Admin".
16. Write an SQL query to print details of the Workers whose FIRST_NAME contains 'a'.
17. Write an SQL query to print details of the Workers whose FIRST_NAME ends with 'a'.
18. Write an SQL query to print details of the Workers whose FIRST_NAME ends with 'h' and contains six alphabets.
19. Write an SQL query to print details of the Workers whose SALARY lies between 100000 and 500000.
20. Write an SQL query to print details of the Workers who have joined in Feb'2014.
21. Write an SQL query to fetch the count of employees working in the department 'Admin'.
22. Write an SQL query to fetch worker names with salaries >= 50000 and <= 100000.
23. Write an SQL query to fetch the no. of workers for each department in the descending order.
24. Write an SQL query to print details of the Workers who are also Managers.
25. Write an SQL query to fetch duplicate records having matching data in some fields of a table.
26. Write an SQL query to show only odd rows from a table.
27. Write an SQL query to show only even rows from a table.
28. Write an SQL query to clone a new table from another table.
29. Write an SQL query to fetch intersecting records of two tables.
30. Write an SQL query to show records from one table that another table does not have.
31. Write an SQL query to show the current date and time.
32. Write an SQL query to show the top n (say 10) records of a table.
33. Write an SQL query to determine the nth (say n=5) highest salary from a table.
34. Write an SQL query to determine the 5th highest salary without using TOP or limit method.
35. Write an SQL query to fetch the list of employees with the same salary.
36. Write an SQL query to show the second highest salary from a table.
37. Write an SQL query to show one row twice in results from a table.

38. Write an SQL query to fetch intersecting records of two tables.
39. Write an SQL query to fetch the first 50% records from a table.
40. Write an SQL query to fetch the departments that have less than five people in it.
41. Write an SQL query to show all departments along with the number of people in there.
42. Write an SQL query to show the last record from a table.
43. Write an SQL query to fetch the first row of a table.
44. Write an SQL query to fetch the last five records from a table.
45. Write an SQL query to print the name of employees having the highest salary in each department.
46. Write an SQL query to fetch three max salaries from a table.
47. Write an SQL query to fetch three min salaries from a table.
48. Write an SQL query to fetch nth max salaries from a table.
49. Write an SQL query to fetch departments along with the total salaries paid for each of them.
50. Write an SQL query to fetch the names of workers who earn the highest salary.