

## ASSESSMENT -1 SQL

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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');

```

### QUESTIONS:-

Q-1. Write an SQL query to fetch "FIRST\_NAME" from Worker table using the alias name as <WORKER NAME>.

```
SELECT FIRST_NAME AS 'WORKER NAME'  
FROM Worker;
```

Q-2. Write an SQL query to fetch "FIRST\_NAME" from Worker table in upper case.

```
SELECT UPPER(FIRST_NAME)  
FROM Worker;
```

Q-3. Write an SQL query to fetch unique values of DEPARTMENT from Worker table.

```
SELECT DISTINCT DEPARTMENT  
FROM Worker;
```

Q-4. Write an SQL query to print the first three characters of FIRST NAME from Worker table.

```
SELECT LEFT(FIRST_NAME, 3)  
FROM Worker;
```

Q-5. Write an SQL query to find the position of the alphabet ('a') in the first name column 'Amitabh' from Worker table.

```
SELECT INSTR(FIRST_NAME, 'a')  
FROM Worker
```

```
WHERE FIRST_NAME = 'Amitabh';
```

Q-6. Write an SQL query to print the FIRST\_NAME from Worker table after removing white spaces from the right side.

```
SELECT RTRIM(FIRST_NAME)  
FROM Worker;
```

Q-7. Write an SQL query to print the DEPARTMENT from Worker table after removing white spaces from the left side.

```
SELECT LTRIM(DEPARTMENT)
```

```
FROM Worker;
```

Q-8. Write an SQL query that fetches the unique values of DEPARTMENT from Worker table and prints its length.

```
SELECT DISTINCT DEPARTMENT, LENGTH(DEPARTMENT) AS DeptLength
```

```
FROM Worker;
```

Q-9. Write an SQL query to print the FIRST\_NAME from Worker table after replacing 'a' with 'A'.

```
SELECT REPLACE(FIRST_NAME, 'a', 'A')
```

```
FROM Worker;
```

Q-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.

```
SELECT CONCAT(FIRST_NAME, ' ', LAST_NAME) AS COMPLETE_NAME
```

```
FROM Worker;
```

Q-11. Write an SQL query to print all Worker details from the Worker table order by FIRST\_NAME Ascending.

```
SELECT *
```

```
FROM Worker
```

```
ORDER BY FIRST_NAME ASC;
```

Q-12. 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;
```

Q-13. Write an SQL query to print details for Workers with the first name as "Vipul" and "Satish" from Worker table.

```
SELECT *  
  
FROM Worker  
  
WHERE FIRST_NAME IN ('Vipul', 'Satish');
```

Q-14. Write an SQL query to print details of workers excluding first names, "Vipul" and "Satish" from Worker table.

```
SELECT *  
  
FROM Worker  
  
WHERE FIRST_NAME NOT IN ('Vipul', 'Satish');
```

Q-15. Write an SQL query to print details of Workers with DEPARTMENT name as "Admin".

```
SELECT *  
  
FROM Worker  
  
WHERE DEPARTMENT = 'Admin';
```

Q-16. Write an SQL query to print details of the Workers whose FIRST\_NAME contains 'a'.

```
SELECT *  
  
FROM Worker  
  
WHERE FIRST_NAME LIKE '%a%';
```

Q-17. Write an SQL query to print details of the Workers whose FIRST\_NAME ends with 'a'.

```
SELECT *
```

```
FROM Worker  
WHERE FIRST_NAME LIKE '%a';
```

Q-18. 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';
```

Q-19. 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;
```

Q-20. Write an SQL query to print details of the Workers who have joined in Feb'2014.

```
SELECT *  
FROM Worker  
WHERE JOINING_DATE BETWEEN '2014-02-01' AND '2014-02-28 23:59:59';
```

Q-21. Write an SQL query to fetch the count of employees working in the department 'Admin'.

```
SELECT COUNT(*) AS AdminCount  
FROM Worker  
WHERE DEPARTMENT = 'Admin';
```

Q-22. Write an SQL query to fetch worker names with salaries  $\geq 50000$  and  $\leq 100000$ .

```
SELECT FIRST_NAME, LAST_NAME  
FROM Worker  
WHERE SALARY BETWEEN 50000 AND 100000;
```

Q-23. Write an SQL query to fetch the no. of workers for each department in the descending order.

```
SELECT DEPARTMENT, COUNT(*) AS NumberOfWorkers  
FROM Worker  
GROUP BY DEPARTMENT  
ORDER BY NumberOfWorkers DESC;
```

Q-24. 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';
```

Q-25. Write an SQL query to fetch duplicate records having matching data in some fields of a table.

```
SELECT FIRST_NAME, LAST_NAME, COUNT(*)  
FROM Worker  
GROUP BY FIRST_NAME, LAST_NAME  
HAVING COUNT(*) > 1;
```

Q-26. Write an SQL query to show only odd rows from a table.



```
SELECT *  
FROM Worker  
WHERE MOD(WORKER_ID, 2) = 1;
```