#### Lab practice Assignment

Name:P.Sony Priya *No:19PA1A05E9* Cse-c Creating table worker: CREATE TABLE Worker ( WORKER ID INT NOT NULL PRIMARY KEY, FIRST\_NAME VARCHAR(25), LAST NAME VARCHAR(25), SALARY INT, JOINING DATE TIMESTAMP, DEPARTMENT VARCHAR(25) Table created. INSERT INTO WORKER VALUES(001, 'Monica', 'Arora', 100000, (TIMESTAMP '2014-02-20 09:00:00'), 'HR') 1 row(s) inserted. INSERT INTO WORKER VALUES(002, 'Niharica', 'Verma', 80000, (TIMESTAMP'2014-06-11 09:00:00'), 'Admin') 1 row(s) inserted. INSERT INTO WORKER VALUES(003, 'Varshal', 'Singhal', 300000, (TIMESTAMP'2014-02-20 09:00:00'), 'HR') 1 row(s) inserted. INSERT INTO WORKER VALUES(004, 'Amitabh', 'Singh', 500000, (TIMESTAMP'2014-02-20 09:00:00'), 'Admin') 1 row(s) inserted.

INSERT INTO WORKER VALUES (005, 'Vivek', 'Bhati', 500000, (TIMESTAMP'2014-06-11

INSERT INTO WORKER VALUES (006, 'Vipul', 'Diwan', 200000, (TIMESTAMP'2014-06-11

09:00:00'), 'Admin')
1 row(s) inserted.

09:00:00'), 'Account')

1 row(s) inserted

```
INSERT INTO WORKER VALUES(007,'Satish','Kumar',75000,(TIMESTAMP'2014-01-20
09:00:00'),'Account')
1 row(s) inserted.
INSERT INTO WORKER VALUES(008,'Geetika','Chauhan',90000,(TIMESTAMP'2014-04-11
09:00:00'),'Admin')
1 row(s) inserted.
```

#### SELECT \* FROM Worker ORDER BY WORKER\_ID

| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE                    | DEPARTMENT |
|-----------|------------|-----------|--------|---------------------------------|------------|
| 1         | Monica     | Arora     | 100000 | 20-FEB-14 09.00.00.000000<br>AM | HR         |
| 2         | Niharica   | Verma     | 80000  | 11-JUN-14 09.00.00.000000<br>AM | Admin      |
| 3         | Varshal    | Singhal   | 300000 | 20-FEB-14 09.00.00.000000<br>AM | HR         |
| 4         | Amitabh    | Singh     | 500000 | 20-FEB-14 09.00.00.000000<br>AM | Admin      |
| 5         | Vivek      | Bhati     | 500000 | 11-JUN-14 09.00.00.000000<br>AM | Admin      |
| 6         | Vipul      | Diwan     | 200000 | 11-JUN-14 09.00.00.000000<br>AM | Account    |
| 7         | Satish     | Kumar     | 75000  | 20-JAN-14 09.00.00.000000<br>AM | Account    |
| 8         | Geetika    | Chauhan   | 90000  | 11-APR-14 09.00.00.000000<br>AM | Admin      |

8 rows selected.

#### Creating table Bonus:

```
CREATE TABLE Bonus (

WORKER_REF_ID INT,

BONUS_DATE TIMESTAMP,

BONUS_AMOUNT INT,

FOREIGN KEY (WORKER_REF_ID)

REFERENCES Worker(WORKER_ID)

ON DELETE CASCADE

)

Table created.

INSERT INTO Bonus VALUES(1,(TIMESTAMP '2016-02-20 00:00:00'),5000)

1 row(s) inserted.

INSERT INTO Bonus VALUES(2,(TIMESTAMP '2016-06-11 00:00:00'),3000)

1 row(s) inserted.

INSERT INTO Bonus VALUES(3,(TIMESTAMP '2016-02-20 00:00:00'),4000)
```

```
1 row(s) inserted.

INSERT INTO Bonus VALUES(1,(TIMESTAMP '2016-02-20 00:00:00'),4500)

1 row(s) inserted.

INSERT INTO Bonus VALUES(2,(TIMESTAMP '2016-06-11 00:00:00'),3500)

1 row(s) inserted.
```

#### SELECT \* FROM Bonus

| WORKER_REF_ID    | BONUS_DATE                   | BONUS_AMOUNT |
|------------------|------------------------------|--------------|
| 2                | 11-JUN-16 00.00.00.000000 AM | 3000         |
| 3                | 20-FEB-16 00.00.00.000000 AM | 4000         |
| 2                | 11-JUN-16 00.00.00.000000 AM | 3500         |
| 1                | 20-FEB-16 00.00.00.000000 AM | 5000         |
| 1                | 20-FEB-16 00.00.00.000000 AM | 4500         |
| 5 rows selected. |                              |              |

#### **Creating table Title:**

```
CREATE TABLE Title (
                    WORKER_REF_ID INT,
                    WORKER TITLE CHAR(25),
                    AFFECTED FROM TIMESTAMP,
                    FOREIGN KEY (WORKER REF ID)
                    REFERENCES Worker(WORKER ID)
                    ON DELETE CASCADE
                    )
Table created.
INSERT INTO TITLE VALUES(1, 'Manager', (TIMESTAMP'2016-02-20 00:00:00'))
1 row(s) inserted.
INSERT INTO TITLE VALUES(2, 'Executive', (TIMESTAMP'2016-06-11 00:00:00'))
1 row(s) inserted.
INSERT INTO TITLE VALUES(8, 'Executive', (TIMESTAMP'2016-06-11 00:00:00'))
1 row(s) inserted.
INSERT INTO TITLE VALUES(5, 'Manager', (TIMESTAMP'2016-06-11 00:00:00'))
1 row(s) inserted.
INSERT INTO TITLE VALUES(4, 'Asst.Manager', (TIMESTAMP'2016-06-11 00:00:00'))
1 row(s) inserted.
INSERT INTO TITLE VALUES(7, 'Executive', (TIMESTAMP'2016-06-11 00:00:00'))
1 row(s) inserted.
INSERT INTO TITLE VALUES(6, 'Lead', (TIMESTAMP'2016-06-11 00:00:00'))
1 row(s) inserted.
```

```
INSERT INTO TITLE VALUES(3, 'Lead', (TIMESTAMP'2016-06-11 00:00:00'))

1 row(s) inserted.
```

SELECT \* FROM Title

| WORKER_REF_ID    | WORKER_TITLE | AFFECTED_FROM                |
|------------------|--------------|------------------------------|
| 8                | Executive    | 11-JUN-16 12.00.00.000000 AM |
| 3                | Lead         | 11-JUN-16 12.00.00.000000 AM |
| 2                | Executive    | 11-JUN-16 12.00.00.000000 AM |
| 4                | Asst.Manager | 11-JUN-16 12.00.00.000000 AM |
| 1                | Manager      | 20-FEB-16 12.00.00.000000 AM |
| 5                | Manager      | 11-JUN-16 12.00.00.000000 AM |
| 6                | Lead         | 11-JUN-16 12.00.00.000000 AM |
| 7                | Executive    | 11-JUN-16 12.00.00.000000 AM |
| 8 rows selected. |              |                              |

#### 50 SQL Query Question and answers

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

SELECT FIRST\_NAME AS WORKER\_NAME FROM Worker WORKER\_NAME

Amitabh

Vipul

Satish

Niharica

Vivek

Monica

Varshal

Geetika

8 rows selected.

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

SELECT UPPER(FIRST\_NAME) FROM Worker

**UPPER(FIRST NAME)** 

**AMITABH** 

**VIPUL** 

**SATISH** 

**NIHARICA** 

**VIVEK** 

**MONICA** 

VARSHAL

**GEETIKA** 

8 rows selected.

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

SELECT UNIQUE DEPARTMENT FROM Worker

#### **DEPARTMENT**

HR

Account

Admin

3 rows selected.

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

SELECT SUBSTR(FIRST\_NAME,1,3) FROM Worker

**SUBSTR(FIRST NAME,1,3)** 

Ami

Vip

Sat

Nih



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'
INSTR(FIRST_NAME,'A')
5
```

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

### RTRIM(FIRST\_NAME) Varshal

Amitabh

Vivek

Vipul

Satish

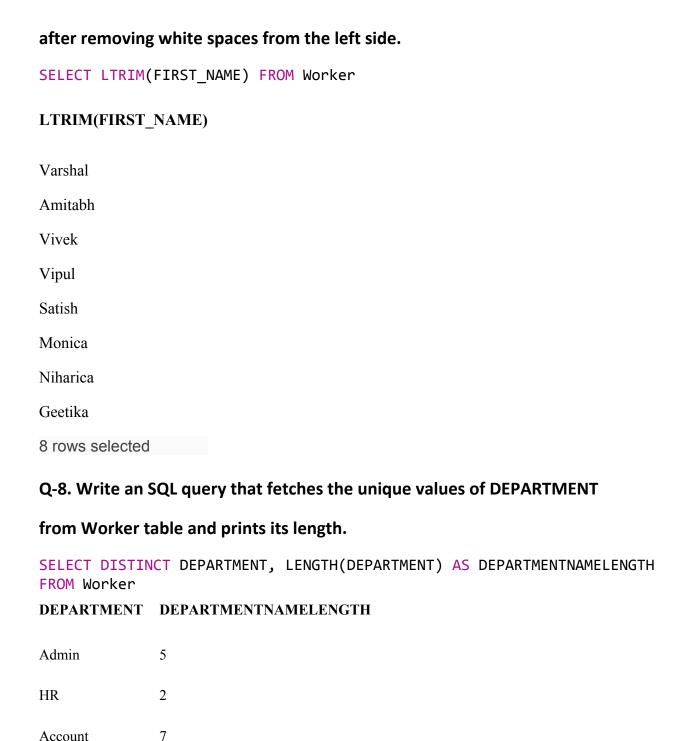
Monica

Niharica

Geetika

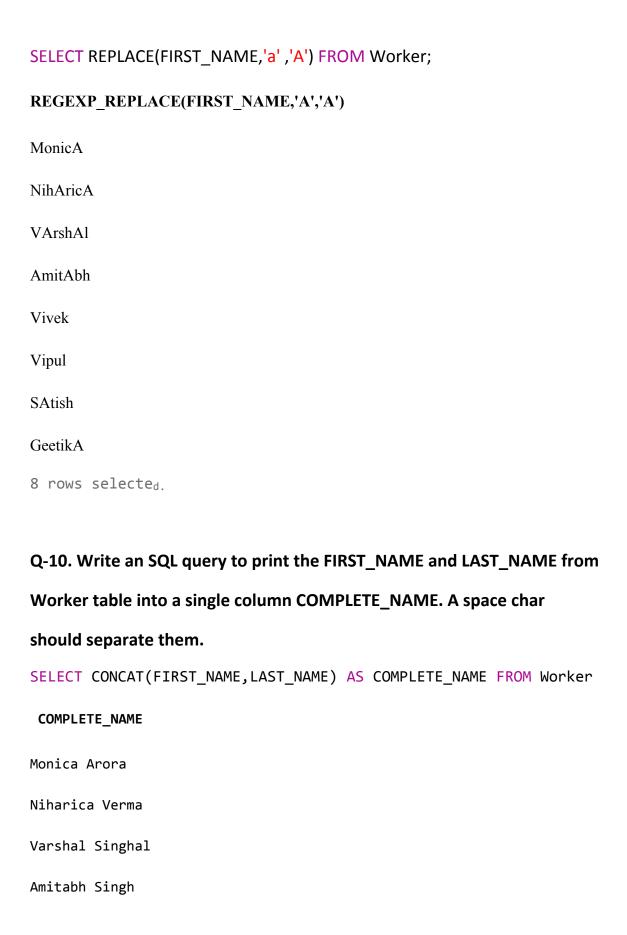
8 rows selected

Q-7. Write an SQL query to print the DEPARTMENT from Worker table



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

3 rows selected.



Vivek Bhati

Vipul Diwan

Satish Kumar

Geetika Chauhan

8 rows selected.

# 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;

| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE                 | DEPARTMENT |
|-----------|------------|-----------|--------|------------------------------|------------|
| 4         | Amitabh    | Singh     | 500000 | 20-FEB-14 09.00.00.000000 AM | Admin      |
| 8         | Geetika    | Chauhan   | 90000  | 11-APR-14 09.00.00.000000 AM | Admin      |
| 1         | Monica     | Arora     | 100000 | 20-FEB-14 09.00.00.000000 AM | HR         |
| 2         | Niharica   | Verma     | 80000  | 11-JUN-14 09.00.00.000000 AM | Admin      |
| 7         | Satish     | Kumar     | 75000  | 20-JAN-14 09.00.00.000000 AM | Account    |
| 3         | Varshal    | Singhal   | 300000 | 20-FEB-14 09.00.00.000000 AM | HR         |
| 6         | Vipul      | Diwan     | 200000 | 11-JUN-14 09.00.00.000000 AM | Account    |
| 5         | Vivek      | Bhati     | 500000 | 11-JUN-14 09.00.00.000000 AM | Admin      |

8 rows selected.

# 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

| WORKER_I<br>D | FIRST_NAM<br>E | LAST_NAM<br>E | SALAR<br>Y | JOINING_DATE                    | DEPARTMEN<br>T |
|---------------|----------------|---------------|------------|---------------------------------|----------------|
| 4             | Amitabh        | Singh         | 500000     | 20-FEB-14 09.00.00.000000<br>AM | Admin          |
| 8             | Geetika        | Chauhan       | 90000      | 11-APR-14 09.00.00.000000<br>AM | Admin          |
| 1             | Monica         | Arora         | 100000     | 20-FEB-14 09.00.00.000000<br>AM | HR             |
| 2             | Niharica       | Verma         | 80000      | 11-JUN-14 09.00.00.000000<br>AM | Admin          |
| 7             | Satish         | Kumar         | 75000      | 20-JAN-14 09.00.00.000000 AM    | Account        |
| 3             | Varshal        | Singhal       | 300000     | 20-FEB-14 09.00.00.000000<br>AM | HR             |
| 6             | Vipul          | Diwan         | 200000     | 11-JUN-14 09.00.00.000000<br>AM | Account        |
| 5             | Vivek          | Bhati         | 500000     | 11-JUN-14 09.00.00.000000<br>AM | Admin          |

### 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');

| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE                 | DEPARTMEN<br>T |
|-----------|------------|-----------|--------|------------------------------|----------------|
| 6         | Vipul      | Diwan     | 200000 | 11-JUN-14 09.00.00.000000 AM | Account        |
| 7         | Satish     | Kumar     | 75000  | 20-JAN-14 09.00.00.000000 AM | Account        |

<sup>2</sup> rows selected.

# 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');

WORKER\_ID FIRST\_NAME LAST\_NAME SALARY JOINING\_DATE DEPARTMENT

| 1 | Monica   | Arora   | 100000 | 20-FEB-14 09.00.00.000000 AM | HR    |
|---|----------|---------|--------|------------------------------|-------|
| 2 | Niharica | Verma   | 80000  | 11-JUN-14 09.00.00.000000 AM | Admin |
| 3 | Varshal  | Singhal | 300000 | 20-FEB-14 09.00.00.000000 AM | HR    |
| 4 | Amitabh  | Singh   | 500000 | 20-FEB-14 09.00.00.000000 AM | Admin |
| 5 | Vivek    | Bhati   | 500000 | 11-JUN-14 09.00.00.000000 AM | Admin |
| 8 | Geetika  | Chauhan | 90000  | 11-APR-14 09.00.00.000000 AM | Admin |

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

#### SELECT \* FROM Worker WHERE DEPARTMENT LIKE 'Admin%'

| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE                 | DEPARTMENT |
|-----------|------------|-----------|--------|------------------------------|------------|
| 2         | Niharica   | Verma     | 80000  | 11-JUN-14 09.00.00.000000 AM | Admin      |
| 4         | Amitabh    | Singh     | 500000 | 20-FEB-14 09.00.00.000000 AM | Admin      |
| 5         | Vivek      | Bhati     | 500000 | 11-JUN-14 09.00.00.000000 AM | Admin      |
| 8         | Geetika    | Chauhan   | 90000  | 11-APR-14 09.00.00.000000 AM | Admin      |

<sup>4</sup> rows selected.

# 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%';

| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE                 | DEPARTMENT |
|-----------|------------|-----------|--------|------------------------------|------------|
| 1         | Monica     | Arora     | 100000 | 20-FEB-14 09.00.00.000000 AM | HR         |
| 2         | Niharica   | Verma     | 80000  | 11-JUN-14 09.00.00.000000 AM | Admin      |

| 3 | Varshal | Singhal | 300000 | 20-FEB-14 09.00.00.000000 AM | HR      |
|---|---------|---------|--------|------------------------------|---------|
| 4 | Amitabh | Singh   | 500000 | 20-FEB-14 09.00.00.000000 AM | Admin   |
| 7 | Satish  | Kumar   | 75000  | 20-JAN-14 09.00.00.000000 AM | Account |
| 8 | Geetika | Chauhan | 90000  | 11-APR-14 09.00.00.000000 AM | Admin   |

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

SELECT \* FROM Workers where FIRST\_NAME like '%a'

| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE                 | DEPARTMENT |
|-----------|------------|-----------|--------|------------------------------|------------|
| 8         | Geetika    | Chauhan   | 90000  | 11-APR-14 09.00.00.000000 AM | Admin      |
| 1         | Monica     | Arora     | 100000 | 20-FEB-14 09.00.00.000000 AM | HR         |
| 2         | Niharica   | Verma     | 80000  | 11-JUN-14 09.00.00.000000 AM | Admin      |

<sup>3</sup> rows selected.

### Q-18. Write an SQL query to print details of the Workers whose FIRST\_NAME ends with 'h' and contains six alphabets.

SELECT \* FROM Workers where FIRST\_NAME like '\_\_\_\_h'

WORKER\_ID FIRST\_NAME LAST\_NAME SALARY JOINING\_DATE DEPARTMENT

7 Satish Kumar 75000 20-JAN-14 09.00.00.000000 AM Account

### 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;

| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE                 | DEPARTMENT |
|-----------|------------|-----------|--------|------------------------------|------------|
| 1         | Monica     | Arora     | 100000 | 20-FEB-14 09.00.00.000000 AM | HR         |
| 3         | Varshal    | Singhal   | 300000 | 20-FEB-14 09.00.00.000000 AM | HR         |
| 4         | Amitabh    | Singh     | 500000 | 20-FEB-14 09.00.00.000000 AM | Admin      |
| 5         | Vivek      | Bhati     | 500000 | 11-JUN-14 09.00.00.000000 AM | Admin      |
| 6         | Vipul      | Diwan     | 200000 | 11-JUN-14 09.00.00.000000 AM | Account    |

<sup>5</sup> rows selected.

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

SELECT \* FROM Worker WHERE TO\_CHAR(JOINING\_DATE, 'YYYY')='2014' AND TO CHAR(JOINING DATE, 'MM')='02'

| WORKER_ID       | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE                 | DEPARTMENT |
|-----------------|------------|-----------|--------|------------------------------|------------|
| 1               | Monica     | Arora     | 100000 | 20-FEB-14 09.00.00.000000 AM | HR         |
| 3               | Varshal    | Singhal   | 300000 | 20-FEB-14 09.00.00.000000 AM | HR         |
| 4               | Amitabh    | Singh     | 500000 | 20-FEB-14 09.00.00.000000 AM | Admin      |
| 3 rows selected |            |           |        |                              |            |

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

SELECT COUNT(\*) FROM Worker WHERE DEPARTMENT = 'Admin';
COUNT(\*)

#### Q-22. Write an SQL query to fetch worker names with salaries >= 50000

and <= 100000.

SELECT CONCAT(FIRST NAME, LAST NAME) As Worker Name, Salary

**FROM** worker

WHERE WORKER\_ID IN (SELECT WORKER\_ID FROM worker

WHERE Salary BETWEEN 50000 AND 100000);

WORKER\_NAME SALARY

Monica Arora 100000

Niharica Verma 80000

Satish Kumar 75000

Geetika Chauhan 90000

4 rows selected.

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

SELECT DEPARTMENT, count(WORKER\_ID) No\_Of\_Workers

**FROM** worker

**GROUP BY DEPARTMENT** 

ORDER BY No Of Workers DESC

DEPARTMENT NO\_OF\_WORKERS

Admin 4

HR 2

```
Account 2
```

### Q-24. Write an SQL query to print details of the Workers who are also Managers.

SELECT DISTINCT W.FIRST\_NAME, T.WORKER\_TITLE

FROM Worker W

**INNER JOIN Title T** 

ON W.WORKER\_ID = T.WORKER\_REF\_ID

AND T.WORKER\_TITLE in ('Manager')

FIRST\_NAME WORKER\_TITLE

Vivek Manager

Monica Manager

2 rows selected.

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

SELECT WORKER\_TITLE, AFFECTED\_FROM, COUNT(\*)

**FROM Title** 

GROUP BY WORKER\_TITLE, AFFECTED\_FROM

HAVING COUNT(\*) > 1;

| WORKER_TITLE | AFFECTED_FROM                | COUNT(*) |
|--------------|------------------------------|----------|
| Executive    | 11-JUN-16 12.00.00.000000 AM | 3        |
| Lead         | 11-JUN-16 12.00.00.000000 AM | 2        |

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

SELECT \* FROM Worker WHERE MOD (WORKER\_ID, 2) <> 0;

| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE                 | DEPARTMENT |
|-----------|------------|-----------|--------|------------------------------|------------|
| 1         | Monica     | Arora     | 100000 | 20-FEB-14 09.00.00.000000 AM | HR         |
| 3         | Varshal    | Singhal   | 300000 | 20-FEB-14 09.00.00.000000 AM | HR         |
| 5         | Vivek      | Bhati     | 500000 | 11-JUN-14 09.00.00.000000 AM | Admin      |
| 7         | Satish     | Kumar     | 75000  | 20-JAN-14 09.00.00.000000 AM | Account    |

<sup>4</sup> rows selected.

#### Q-27. Write an SQL query to show only even rows from a table.

SELECT \* FROM Worker WHERE MOD (WORKER\_ID, 2) = 0;

| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE                 | DEPARTMENT |
|-----------|------------|-----------|--------|------------------------------|------------|
| 2         | Niharica   | Verma     | 80000  | 11-JUN-14 09.00.00.000000 AM | Admin      |
| 4         | Amitabh    | Singh     | 500000 | 20-FEB-14 09.00.00.000000 AM | Admin      |
| 6         | Vipul      | Diwan     | 200000 | 11-JUN-14 09.00.00.000000 AM | Account    |
| 8         | Geetika    | Chauhan   | 90000  | 11-APR-14 09.00.00.000000 AM | Admin      |

<sup>4</sup> rows selected.

#### Q-28. Write an SQL query to clone a new table from another table.

#### CREATE TABLE Workerclone AS SELECT \* FROM Worker;

Table created.

#### **SELECT \* FROM Workerclone**

| WORKER_ID        | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE                     | DEPARTMENT |
|------------------|------------|-----------|--------|----------------------------------|------------|
| 1                | Monica     | Arora     | 100000 | 20-FEB-14 09.00.00.000000<br>AM  | HR         |
| 2                | Niharica   | Verma     | 80000  | 11-JUN-14 09.00.00.0000000<br>AM | Admin      |
| 3                | Varshal    | Singhal   | 300000 | 20-FEB-14 09.00.00.0000000<br>AM | HR         |
| 4                | Amitabh    | Singh     | 500000 | 20-FEB-14 09.00.00.000000<br>AM  | Admin      |
| 5                | Vivek      | Bhati     | 500000 | 11-JUN-14 09.00.00.000000<br>AM  | Admin      |
| 6                | Vipul      | Diwan     | 200000 | 11-JUN-14 09.00.00.000000<br>AM  | Account    |
| 7                | Satish     | Kumar     | 75000  | 20-JAN-14 09.00.00.000000<br>AM  | Account    |
| 8                | Geetika    | Chauhan   | 90000  | 11-APR-14 09.00.00.000000<br>AM  | Admin      |
| 8 rows selected. |            |           |        |                                  |            |

#### Q-29. Write an SQL query to fetch intersecting records of two tables.

**SELECT \* FROM Worker** 

#### INTERSECT

#### SELECT \* FROM WorkerClone;

| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE                     | DEPARTMENT |
|-----------|------------|-----------|--------|----------------------------------|------------|
| 1         | Monica     | Arora     | 100000 | 20-FEB-14 09.00.00.0000000<br>AM | HR         |
| 2         | Niharica   | Verma     | 80000  | 11-JUN-14 09.00.00.000000<br>AM  | Admin      |
| 3         | Varshal    | Singhal   | 300000 | 20-FEB-14 09.00.00.0000000<br>AM | HR         |
| 4         | Amitabh    | Singh     | 500000 | 20-FEB-14 09.00.00.000000<br>AM  | Admin      |
| 5         | Vivek      | Bhati     | 500000 | 11-JUN-14 09.00.00.000000<br>AM  | Admin      |

| 6               | Vipul   | Diwan   | 200000 | 11-JUN-14 09.00.00.000000<br>AM | Account |
|-----------------|---------|---------|--------|---------------------------------|---------|
| 7               | Satish  | Kumar   | 75000  | 20-JAN-14 09.00.00.000000<br>AM | Account |
| 8               | Geetika | Chauhan | 90000  | 11-APR-14 09.00.00.000000<br>AM | Admin   |
| 8 rows selected | l.      |         |        |                                 |         |

### Q-30. Write an SQL query to show records from one table that another table does not have.

**SELECT \* FROM Worker** 

**MINUS** 

**SELECT \* FROM Workerclone**;

no data found

#### Q-31. Write an SQL query to show the current date and time.

SELECT TO\_CHAR(SYSDATE, 'MM-DD-YY HH24:MI:SS')"NOW"FROM DUAL;

NOW

05-25-21 06:16:25

#### Q-32. Write an SQL query to show the top n (say 10) records of a table.

SELECT \* FROM (SELECT \* FROM Worker ORDER BY Salary DESC)

WHERE ROWNUM <= 10;

| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE                 | DEPARTMENT |
|-----------|------------|-----------|--------|------------------------------|------------|
| 4         | Amitabh    | Singh     | 500000 | 20-FEB-14 09.00.00.000000 AM | Admin      |
| 5         | Vivek      | Bhati     | 500000 | 11-JUN-14 09.00.00.000000 AM | Admin      |
| 3         | Varshal    | Singhal   | 300000 | 20-FEB-14 09.00.00.000000 AM | HR         |
| 6         | Vipul      | Diwan     | 200000 | 11-JUN-14 09.00.00.000000 AM | Account    |

| 1 | Monica   | Arora   | 100000 | 20-FEB-14 09.00.00.000000 AM | HR      |
|---|----------|---------|--------|------------------------------|---------|
| 8 | Geetika  | Chauhan | 90000  | 11-APR-14 09.00.00.000000 AM | Admin   |
| 2 | Niharica | Verma   | 80000  | 11-JUN-14 09.00.00.000000 AM | Admin   |
| 7 | Satish   | Kumar   | 75000  | 20-JAN-14 09.00.00.000000 AM | Account |

90000

### Q-33. Write an SQL query to determine the nth (say n=5) highest salary from a table.

```
SELECT Salary

FROM Worker W1

WHERE 5 = (

SELECT COUNT( DISTINCT ( W2.Salary ) )

FROM Worker W2

WHERE W2.Salary >= W1.Salary )

SALARY
```

# Q-34. Write an SQL query to determine the 5th highest salary without using TOP or limit method

```
FROM Worker W1

WHERE 5 = (

SELECT COUNT( DISTINCT ( W2.Salary ) )

FROM Worker W2
```

```
WHERE W2.Salary >= W1.Salary )
SALARY
```

90000

salary.

### Q-35. Write an SQL query to fetch the list of employees with the same

SELECT distinct W.WORKER\_ID, W.FIRST\_NAME, W.Salary

FROM Worker W, Worker W1

WHERE W.Salary = W1.Salary

AND W.WORKER ID != W1.WORKER ID;

WORKER\_ID FIRST\_NAME SALARY

4 Amitabh 500000

5 Vivek 500000

2 rows selected.

#### Q-36. Write an SQL query to show the second highest salary from a table.

SELECT MAX(Salary) FROM Worker

WHERE Salary NOT IN (SELECT MAX(Salary) FROM Worker);

MAX(SALARY)

300000

#### Q-37. Write an SQL query to show one row twice in results from a table.

SELECT FIRST\_NAME, DEPARTMENT FROM worker W WHERE W.DEPARTMENT='HR'

#### **UNION ALL**

#### SELECT FIRST\_NAME, DEPARTMENT FROM Worker W1 WHERE W1.DEPARTMENT='HR'

#### FIRST\_NAME DEPARTMENT

Monica HR

Varshal HR

Monica HR

Varshal HR

4 rows selected.

#### Q-38. Write an SQL query to fetch intersecting records of two tables.

**SELECT \* FROM Worker** 

#### INTERSECT

#### SELECT \* FROM WorkerClone;

| WORKER_ID        | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE                     | DEPARTMENT |
|------------------|------------|-----------|--------|----------------------------------|------------|
| 1                | Monica     | Arora     | 100000 | 20-FEB-14 09.00.00.0000000<br>AM | HR         |
| 2                | Niharica   | Verma     | 80000  | 11-JUN-14 09.00.00.000000<br>AM  | Admin      |
| 3                | Varshal    | Singhal   | 300000 | 20-FEB-14 09.00.00.000000<br>AM  | HR         |
| 4                | Amitabh    | Singh     | 500000 | 20-FEB-14 09.00.00.000000<br>AM  | Admin      |
| 5                | Vivek      | Bhati     | 500000 | 11-JUN-14 09.00.00.000000<br>AM  | Admin      |
| 6                | Vipul      | Diwan     | 200000 | 11-JUN-14 09.00.00.000000<br>AM  | Account    |
| 7                | Satish     | Kumar     | 75000  | 20-JAN-14 09.00.00.000000<br>AM  | Account    |
| 8                | Geetika    | Chauhan   | 90000  | 11-APR-14 09.00.00.000000<br>AM  | Admin      |
| 8 rows selected. |            |           |        |                                  |            |

#### Q-39. Write an SQL query to fetch the first 50% records from a table.

SELECT \* FROM Worker

WHERE WORKER\_ID <= (SELECT COUNT(WORKER\_ID)/2 FROM Worker);

| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE                    | DEPARTMENT |
|-----------|------------|-----------|--------|---------------------------------|------------|
| 1         | Monica     | Arora     | 100000 | 20-FEB-14 09.00.00.000000<br>AM | HR         |
| 2         | Niharica   | Verma     | 80000  | 11-JUN-14 09.00.00.000000<br>AM | Admin      |
| 3         | Varshal    | Singhal   | 300000 | 20-FEB-14 09.00.00.000000<br>AM | HR         |
| 4         | Amitabh    | Singh     | 500000 | 20-FEB-14 09.00.00.000000<br>AM | Admin      |

<sup>4</sup> rows selected.

# Q-40. Write an SQL query to fetch the departments that have less than five people in it.

SELECT DEPARTMENT, COUNT(WORKER\_ID) AS NO\_OF\_WORKERS FROM Worker GROUP BY DEPARTMENT HAVING COUNT(WORKER\_ID) < 5

| NO_OF_WORKERS |
|---------------|
| 2             |
| 2             |
| 4             |
|               |

3 rows selected.

Q-41. Write an SQL query to show all departments along with the number of people in there.

SELECT DEPARTMENT, COUNT(DEPARTMENT) AS NO\_OF\_WORKERS FROM Worker GROUP BY DEPARTMENT

DEPARTMENT NO OF WORKERS

HR 2

Account 2

Admin 4

3 rows selected.

#### Q-42. Write an SQL query to show the last record from a table.

SELECT \* FROM Worker WHERE WORKER\_ID = (SELECT MAX(WORKER\_ID) FROM Worker);

| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE                    | DEPARTMENT |
|-----------|------------|-----------|--------|---------------------------------|------------|
| 8         | Geetika    | Chauhan   | 90000  | 11-APR-14<br>09.00.00.000000 AM | Admin      |

#### Q-43. Write an SQL query to fetch the first row of a table.

SELECT \* FROM Worker WHERE WORKER ID = (SELECT MIN(WORKER ID) FROM Worker);

| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE                    | DEPARTMENT |
|-----------|------------|-----------|--------|---------------------------------|------------|
| 1         | Monica     | Arora     | 100000 | 20-FEB-14<br>09.00.00.000000 AM | HR         |

#### Q-44. Write an SQL query to fetch the last five records from a table.

SELECT \* FROM Worker where WORKER\_ID > (SELECT COUNT(\*) FROM Worker) - 5

| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE                 | DEPARTMENT |
|-----------|------------|-----------|--------|------------------------------|------------|
| 4         | Amitabh    | Singh     | 500000 | 20-FEB-14 09.00.00.000000 AM | Admin      |

| 5 | Vivek   | Bhati   | 500000 | 11-JUN-14 09.00.00.000000 AM | Admin   |
|---|---------|---------|--------|------------------------------|---------|
| 6 | Vipul   | Diwan   | 200000 | 11-JUN-14 09.00.00.000000 AM | Account |
| 7 | Satish  | Kumar   | 75000  | 20-JAN-14 09.00.00.000000 AM | Account |
| 8 | Geetika | Chauhan | 90000  | 11-APR-14 09.00.00.000000 AM | Admin   |

### Q-45. Write an SQL query to print the name of employees having the highest salary in each department.

#### Q-46. Write an SQL query to fetch three max salaries from a table

SELECT distinct Salary from worker a WHERE 3 >= (SELECT count(distinct Salary) from worker b WHERE a.Salary <= b.Salary) order by a.Salary DESC;

# **SALARY**500000 300000 200000 3 rows selected.

75000

#### Q-47. Write an SQL query to fetch three min salaries from a table.

SELECT distinct Salary from worker a WHERE 3 >= (SELECT count(distinct Salary) from worker b WHERE a.Salary >= b.Salary) order by a.Salary DESC;

| b WHERE a. Salary >= b. Salary order by a. Salary DESC, |
|---|
| SALARY  |
| 90000   |
| 80000   |

#### Q-48. Write an SQL query to fetch nth max salaries from a table

SELECT distinct Salary from worker a WHERE n >= (SELECT count(distinct Salary) from worker b WHERE a.Salary <= b.Salary) order by a.Salary DESC

### Q-49. Write an SQL query to fetch departments along with the total salaries paid for each of them.

SELECT DEPARTMENT, SUM(Salary) FROM worker GROUP BYDEPARTMENT

DEPARTMENT SUM(SALARY)

HR 40000

Account 275000

Admin 1170000

3 rows selected.

### Q-50. Write an SQL query to fetch the names of workers who earn the highest salary.

SELECT FIRST\_NAME, SALARY FROM Worker WHERE SALARY=(SELECT MAX(SALARY) FROM Worker)

FIRST\_NAME SALARY

Amitabh 500000

Vivek 500000

2 rows selected.