

SQL query questions

```
1  -- Step 1: Create Database
2  -- CREATE DATABASE ORG1;
3  -- USE ORG1;
4
5  -- Step 2: Create Worker Table
6  CREATE TABLE Worker (
7      WORKER_ID INT NOT NULL PRIMARY KEY ,
8      FIRST_NAME CHAR(25),
9      LAST_NAME CHAR(25),
10     SALARY INT(15),
11     JOINING_DATE DATETIME,
12     DEPARTMENT CHAR(25)
13 );
14
15 -- Step 3: Insert Data into Worker Table
16 INSERT INTO Worker (WORKER_ID, FIRST_NAME, LAST_NAME, SALARY, JOINING_DATE, DEPARTMENT) VALUES
17 (001, 'Monika', 'Arora', 100000, '2014-02-20 09:00:00', 'HR'),
18 (002, 'Niharika', 'Verma', 80000, '2014-06-11 09:00:00', 'Admin'),
19 (003, 'Vishal', 'Singhal', 300000, '2014-02-20 09:00:00', 'HR'),
20 (004, 'Amitabh', 'Singh', 500000, '2014-02-20 09:00:00', 'Admin'),
21 (005, 'Vivek', 'Bhati', 500000, '2014-06-11 09:00:00', 'Admin'),
22 (006, 'Vipul', 'Diwan', 200000, '2014-06-11 09:00:00', 'Account'),
23 (007, 'Satish', 'Kumar', 75000, '2014-01-20 09:00:00', 'Account'),
24 (008, 'Geetika', 'Chauhan', 90000, '2014-04-11 09:00:00', 'Admin');
25
26 -- Step 4: Create Bonus Table
27 CREATE TABLE Bonus (
28     WORKER_REF_ID INT,
29     BONUS_AMOUNT INT(10),
30     BONUS_DATE DATETIME,
31     FOREIGN KEY (WORKER_REF_ID)
32     REFERENCES Worker(WORKER_ID)
33     ON DELETE CASCADE
34 );
35
36 -- Step 5: Insert Data into Bonus Table
37 INSERT INTO Bonus (WORKER_REF_ID, BONUS_AMOUNT, BONUS_DATE) VALUES
38 (001, 5000, '2016-02-20'),
39 (002, 3000, '2016-06-11'),
40 (003, 4000, '2016-02-20'),
41 (001, 4500, '2016-02-20'),
42 (002, 3500, '2016-06-11');
43
44 -- Step 6: Create Title Table
45 CREATE TABLE Title (
46     WORKER_REF_ID INT,
47     WORKER_TITLE CHAR(25),
48     AFFECTED_FROM DATETIME,
49     FOREIGN KEY (WORKER_REF_ID)
50     REFERENCES Worker(WORKER_ID)
51     ON DELETE CASCADE
52 );
53
54 -- Step 7: Insert Data into Title Table
55 INSERT INTO Title (WORKER_REF_ID, WORKER_TITLE, AFFECTED_FROM) VALUES
56 (001, 'Manager', '2016-02-20 00:00:00'),
57 (002, 'Executive', '2016-06-11 00:00:00'),
58 (008, 'Executive', '2016-06-11 00:00:00'),
59 (005, 'Manager', '2016-06-11 00:00:00'),
60 (004, 'Asst. Manager', '2016-06-11 00:00:00'),
61 (007, 'Executive', '2016-06-11 00:00:00'),
62 (006, 'Lead', '2016-06-11 00:00:00'),
63 (003, 'Lead', '2016-06-11 00:00:00');
64
65 select * from worker;
66 select * from Bonus;
67 select * from Title;
```

Output:

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin
WORKER_REF_ID	BONUS_AMOUNT	BONUS_DATE			
1	5000	2016-02-20 00:00:00			
2	3000	2016-06-11 00:00:00			
3	4000	2016-02-20 00:00:00			
1	4500	2016-02-20 00:00:00			
2	3500	2016-06-11 00:00:00			
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			

-- 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;
```

worker_name
Monika
Niharika
Vishal
Amitabh
Vivek
Vipul
Satish
Geetika

-- 2. Write an SQL query to fetch "FIRST_NAME" from Worker table in upper case.

```
select upper(FIRST_NAME) as name from worker ;
```

name
MONIKA
NIHARIKA
VISHAL
AMITABH
VIVEK
VIPUL
SATISH
GEETIKA

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

```
select distinct(DEPARTMENT) from Worker;
```

DEPARTMENT
HR
Admin
Account

-- 4. Write an SQL query to print the first three characters of FIRST_NAME from Worker table.
select substring(FIRST_NAME ,1,3) **as** charname **from** Worker;

charname
Mon
Nih
Vis
Ami
Viv
Vip
Sat
Gee

-- 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')
1

-- 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)
Monika
Niharika
Vishal
Amitabh
Vivek
Vipul
Satish
Geetika

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

```
select ltrim(FIRST_NAME) from Worker;
```

ltrim(FIRST_NAME)
Monika
Niharika
Vishal
Amitabh
Vivek
Vipul
Satish
Geetika

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

```
select distinct(DEPARTMENT) , length(DEPARTMENT) from Worker;
```

DEPARTMENT	length(DEPARTMENT)
HR	2
Admin	5
Account	7

-- 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;
```

replace(FIRST_NAME , 'a' , 'A')
MonikA
NihArikA
VishAl
AmitAbh
Vivek
Vipul
SATish
GeetikA

-- 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;
```

COMPLETE_NAME
Monika Arora
Niharika Verma
Vishal Singhal
Amitabh Singh
Vivek Bhati
Vipul Diwan
Satish Kumar
Geetika Chauhan

-- 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	2014-02-20 09:00:00	Admin
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin

-- 12. Print all Worker details ordered by FIRST_NAME Ascending and DEPARTMENT Descending:

```
select * from Worker order by FIRST_NAME asc , DEPARTMENT desc;
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin

-- 13. print details for Workers with the first name as "Vipul" and "Satish" from Worker table.

```
select * from Worker where FIRST_NAME = "Vipul" or FIRST_NAME = "Satish";
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account

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

```
select * from Worker where DEPARTMENT = "Admin";
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

-- 15. 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	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

-- 16. Write an SQL query to print details of the Workers whose FIRST_NAME ends with 'a'.

```
select * from Worker where FIRST_NAME like '%a';
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

-- 17. 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' and length(FIRST_NAME) = 6;
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account

-- 18. 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	Monika	Arora	100000	2014-02-20 09:00:00	HR
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account

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

```
select * from Worker where year(JOINING_DATE) = 2014 and month(JOINING_DATE)=02;
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin

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

```
select count(*) as count_employees from worker where department = "Admin";
```

count_employees
4

-- 21. Write an SQL query to fetch worker names with salaries >= 50000 and <= 100000.

```
select concat(FIRST_NAME , ' ' , LAST_NAME) as worker_name from worker where SALARY between 50000 and 100000;
```

worker_name
Monika Arora
Niharika Verma
Satish Kumar
Geetika Chauhan

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

```
select DEPARTMENT , count(*) as number_worker from worker group by DEPARTMENT order by number_worker desc;
```

DEPARTMENT	number_worker
Admin	4
HR	2
Account	2

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

```
SELECT * FROM Worker JOIN Title ON Worker.WORKER_ID = Title.WORKER_REF_ID WHERE Title.WORKER_TITLE = 'Manager';
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT	WORKER_REF_ID	WORKER_TITLE	AFFECTED_FROM
1	Monika	Arora	100000	2014-02-20 09:00:00	HR	1	Manager	2016-02-20 00:00:00
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin	5	Manager	2016-06-11 00:00:00

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

```
select SALARY , count(*) as count | from Worker group by SALARY having count(*)>1;
```

SALARY	count
500000	2

-- 25. 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	Monika	Arora	100000	2014-02-20 09:00:00	HR
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account

-- 26. 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	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

-- 27. Write an SQL query to clone a new table from another table.

```
CREATE TABLE WorkerClone as select * from worker;
select * from WorkerClone;
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

-- 28. Write an SQL query to fetch intersecting records of two tables.

```
select * from worker inner join Title on worker.WORKER_ID = Title.WORKER_REF_ID;
select * from worker inner join Bonus on worker.WORKER_ID = Bonus.WORKER_REF_ID;
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT	WORKER_REF_ID	WORKER_TITLE	AFFECTED_FROM
1	Monika	Arora	100000	2014-02-20 09:00:00	HR	1	Manager	2016-02-20 00:00:00
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin	2	Executive	2016-06-11 00:00:00
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR	3	Lead	2016-06-11 00:00:00
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin	4	Asst. Manager	2016-06-11 00:00:00
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin	5	Manager	2016-06-11 00:00:00
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account	6	Lead	2016-06-11 00:00:00
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account	7	Executive	2016-06-11 00:00:00
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin	8	Executive	2016-06-11 00:00:00

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT	WORKER_REF_ID	BONUS_AMOUNT	BONUS_DATE
1	Monika	Arora	100000	2014-02-20 09:00:00	HR	1	5000	2016-02-20 00:00:00
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin	2	3000	2016-06-11 00:00:00
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR	3	4000	2016-02-20 00:00:00
1	Monika	Arora	100000	2014-02-20 09:00:00	HR	1	4500	2016-02-20 00:00:00
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin	2	3500	2016-06-11 00:00:00

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

```
select * from worker left join Bonus on worker.WORKER_ID = Bonus.WORKER_REF_ID where Bonus.WORKER_REF_ID is null;
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

-- 30. Write an SQL query to show the current date and time.

```
select now();
```

now()
2025-06-10 16:54:32

-- 31. Write an SQL query to show the top n (say 5) records of a table.

```
select * from worker limit 5;
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin

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

```
select distinct(salary) from worker order by salary desc limit 4,1;
```

salary
900000

-- 33. Write an SQL query to determine the 5th highest salary without using TOP or Limit method.

```
SELECT SALARY FROM Worker w1
WHERE 4 = (
    SELECT COUNT(DISTINCT w2.SALARY)
    FROM Worker w2
    WHERE w2.SALARY > w1.SALARY
);
```

```
+-----+
| SALARY |
+-----+
| 90000  |
+-----+
```

-- 34. Write an SQL query to fetch the list of employees with the same salary.

```
SELECT w1.* FROM Worker w1, Worker w2
WHERE w1.SALARY = w2.SALARY AND w1.WORKER_ID != w2.WORKER_ID;
```

```
+-----+-----+-----+-----+-----+-----+
| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE | DEPARTMENT |
+-----+-----+-----+-----+-----+-----+
|          5 | Vivek      | Bhati     | 500000 | 2014-06-11 09:00:00 | Admin      |
|          4 | Amitabh    | Singh     | 500000 | 2014-02-20 09:00:00 | Admin      |
+-----+-----+-----+-----+-----+-----+
```

-- 35. 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      |
+-----+
```

-- 36. 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;
```

```
+-----+-----+-----+-----+-----+-----+
| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE | DEPARTMENT |
+-----+-----+-----+-----+-----+-----+
|          1 | Monika     | Arora     | 100000 | 2014-02-20 09:00:00 | HR          |
|          1 | Monika     | Arora     | 100000 | 2014-02-20 09:00:00 | HR          |
+-----+-----+-----+-----+-----+-----+
```

-- 37. Write an SQL query to fetch intersecting records of two tables.

SELECT * from Worker inner join bonus on Worker.WORKER_ID = bonus.WORKER_REF_ID;

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT	WORKER_REF_ID	BONUS_AMOUNT	BONUS_DATE
1	Monika	Arora	100000	2014-02-20 09:00:00	HR	1	5000	2016-02-20 00:00:00
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin	2	3000	2016-06-11 00:00:00
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR	3	4000	2016-02-20 00:00:00
1	Monika	Arora	100000	2014-02-20 09:00:00	HR	1	4500	2016-02-20 00:00:00
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin	2	3500	2016-06-11 00:00:00

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

SELECT * FROM Worker WHERE WORKER_ID <= (SELECT COUNT(*)/2 FROM Worker);

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin

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

**SELECT DEPARTMENT, COUNT(*) AS NUM_WORKERS
FROM Worker
GROUP BY DEPARTMENT
HAVING COUNT(*) < 5;**

DEPARTMENT	NUM_WORKERS
HR	2
Admin	4
Account	2

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

**SELECT DEPARTMENT, COUNT(*) AS NUM_WORKERS
FROM Worker
GROUP BY DEPARTMENT;**

DEPARTMENT	NUM_WORKERS
HR	2
Admin	4
Account	2

-- 41. Write an SQL query to show the last record from a table.

```
SELECT * FROM Worker ORDER BY WORKER_ID DESC LIMIT 1;
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

-- 42. Write an SQL query to fetch the first row of a table.

```
SELECT * FROM Worker LIMIT 1;
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR

-- 43. Write an SQL query to fetch the last five records from a table.

```
SELECT * from Worker order by WORKER_ID desc limit 5;
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin

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

```
SELECT w.DEPARTMENT, w.FIRST_NAME, w.SALARY
FROM Worker w
WHERE w.SALARY = (
    SELECT MAX(SALARY) FROM Worker
    WHERE DEPARTMENT = w.DEPARTMENT
);
```

DEPARTMENT	FIRST_NAME	SALARY
HR	Vishal	300000
Admin	Amitabh	500000
Admin	Vivek	500000
Account	Vipul	200000

-- 45. Write an SQL query to fetch three max salaries from a table.

```
select DISTINCT SALARY from Worker order by SALARY desc limit 3;
```

SALARY
500000
300000
200000

-- 46. Write an SQL query to fetch three min salaries from a table.

```
select DISTINCT SALARY from Worker order by SALARY asc limit 3;
```

SALARY
75000
80000
90000

-- 47. Write an SQL query to fetch nth max salaries from a table.

```
SELECT DISTINCT SALARY FROM Worker ORDER BY SALARY DESC LIMIT 4;
```

SALARY
500000
300000
200000
100000

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

```
select DEPARTMENT , sum(SALARY) as sum_salary from Worker group by DEPARTMENT;
```

DEPARTMENT	sum_salary
HR	400000
Admin	1170000
Account	275000

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

```
select FIRST_NAME , LAST_NAME from Worker where salary = (select max(salary) from Worker);
```

FIRST_NAME	LAST_NAME
Amitabh	Singh
Vivek	Bhati