WORKER TABLE

worker-id	First_Name	Last_Name	Salary	Joing. Date	Depart
1	Monika	Arora	1000000		HR
2	Niharika	Verma	80000		Admin
3	Vishal	Singhal	300000		HR
4	Amitabh	Singh	5000000		Admin
5	Vivek	Bharti	500000		"
6	Vipul	Dhwan	200000		Account
7	Satish	Kumar	75000		Account
8.	Deepika	chabban	90000		Admin

BONUS_TABLE:-

Worker-ref-id	Bonus_Amount	Bonus-DATE
1	5000	
2	3000	
3	4000	
1	4500	
2	3500	

Title-table:-

worker_ref-id	Worker-title	Affected_from
1	Manager	
2	Executive	
8	Executive	
5	Manager	
4	Asst. Manager	
7	Executive	

SQL Interview Question

ORG DB

Worker Table

Q-1 WAS To fetch "First_Name" from worker table using the alias name as <worker_Name>

Ans Select first_name as WorkerName from Worker;

Q-2 To fetch "First_Name" from worker table in Upper case.

Ans select upper (First_Name) from worker.

Q-3 To fetch unique value of Departmt from worker table.

Ans select distinct department from worker

OR

select department, [illegible]
group by department.

Q-4 To print first 3 character of First_Name

Ans Selct substring (firstname, 1, 3) from worker.

Q.5 To find the position of the alphabet ('b') in the first-name column 'Amitabh' from worker table.

Ans INSTR()

```
select instr(first_name, 'b') from worker
where first_name = 'Amitabh';
```

O/p = 6

Q.6 To print the first_name from worker table after removing white spaces from the right side.

Ans RTRIM

```
Select RTRIM(first_name) from worker;
```

Q.7 _____ from left side.

Ans

```
Select LTRIM(first_name) from worker;
```

Q.8 That fetch the unique values of department from worker & prints its length.

Ans

```
Select distinct department, length(department)
from worker;
```

O/p

HR	2
Admin	5
Account	7

Q.9 To print the first_name from worker table after replacing 'a' with 'A'.

Ans select Replace(first_name, 'a', 'A') from worker

Q.10 To print first_name & last_name from worker table into a single column complete_Name

Ans select concate(first_name, ' ', last_name) as complete_name from worker;

11 To print all worker details from the worker table order by first_name Ascending

Ans select * from worker order by first_name asc

Amitey	singh
Deepika	chabbra
monika	

12 To print all worker details from the worker table order by First_name ascending and department descending.

Ans select * from worker order by first_name asc, department desc

13 To print details for worker with the first name as "Vipul" & Satish' from worker table.

Ans select * from worker where first_name in ('Vipul', 'Satish');

14 To print details of workers excluding first_names, "Vipul" & "Satish" from worker table.

Ans Select * from worker where first_name Not in ("Vipul', 'Satish');

15 To print detail of workers with department name as "~~Admin~~", "Admin*";

Ans Select * from worker where department like "Admin%";

16 To print details of the workers whose first_name contains 'a'

Ans Select * from worker where firstname like "%a%";

17 First_name ends with a;

_____ like "%a";

18 First_name ends with "h" & contains 6 alphabets";

_____ like "_____h";

19 whose salary lies b/w 100000 & 500000

Select * from worker where salary between 100000 AND 500000;

20 who have joined in Feb 2014

Select * from worker where Year(joining_date) = 2014 AND MONTH(Joining_date) = 02;

21 To fetch the count of employees working in the department 'Admin';

Ans Select department, count(department) from worker group where department = 'Admin' ~~having count(department) > 1~~;

22 To fetch worker full names with salaries >= 50000 and <= 1000000.

Ans Select CONCATE(first_name,,last_name) as fullname, salary from worker where salary between 50000 AND 1000000

23 To fetch the no. of worker for each department in the descending order.

Select department, count(worker_id) from worker group by department order by count(worker_id) dsc;

Q24 To print details of the worker who are also mangers.

Select * from worker where worker id IN (Select worker_ref_id from title where worker_title = "manager");

OR

Select w.* from worker as w inner join title as t on worker_id = worker_ref_id where t.worker_title = "manager";

25 To fetch number (more than 1) of same titles in the ORG. of different types.

Ans Select worker_title, count(*) from title group by worker_title. having count(*) > 1

Q.26 To show only odd rows from a table:

Ans Select * from worker where MOD(worker_id, 2) <> 0;

27 ——— even ———

Select * from worker where MOD(worker_id, 2) = 0;

Q.28 To clone a new table from another table.

Ans Create table Worker_clone like Worker;
Insert into worker_clone select * from worker;

29 Write an SQL Query to fetch intersecting records of two tables.

Ans select * from worker Inner join worker_clone using (worker_id);

30 To show records from one table that another table does not have.

Ans select worker.* from worker left join worker_clone using (worker_id) where worker_clone.worker_id is Null;

31 To show the current date & time.

Select ~~current~~ curdate();
Select now;

31 To show top n (say 5) records of a table order by descending salary.

Ans Select * from worker order by salary desc limit 5;

Q 33 To determine the nth (say n=5) highest salary from a table.

Ans Select * from worker order by salary desc Limit 4, 1 (5th salary)
n-1, 1

OR

Select * from worker where 5 = (select count(salary) from worker group by salary order by count(salary) desc.)

Co-related query:
Select * from worker w1 where 4 = (select count(distinct (w2.salary) from worker w2 where w2.salary >= w1.salary);

Q 35 To fetch the list of employ with the same salary.

Ans Select w1.* from worker w1, worker w2 where w1.salary = w2.salary and w1.worker_id != w2.worker_id;

36 To show the 2nd highest salary from table. without using limit 2 co-related Query. [By using sub-query]

Ans Select max(salary) from worker where salary not in (select max(salary) from worker);

37 To show one row twice in results from a table.

Ans Select * from worker UNION ALL
Select * from worker Order by worker_id;

38 To list work_id who does not get bonus;

Ans Select worker_id from worker where worker_id not in (select worker_ref_id from bonus);

39 To fetch the first 50% records from a table.

Ans Select * from worker where worker_id <= (select count(worker_id)/2 from worker);

40 To fetch the departments that have less than 4 people in it.

Ans Select department, count(department) as depcount from worker group by department having depcount < 4;

41 To show all department along with the no. of people in there.

Ans → select department, count(department) as dpcount from worker group by department;

41 To show the last record of a table.

Ans select * from worker where worker-id = (select max(worker-id) from worker);

42 To fetch the first row of a table.

Ans select * fro ——— (select min(——)

43 To fetch the last 5 record from a table:

Ans (select * from worker ~~group~~ order by worker-id desc limit 5) order by worker-id;

44 To print the name of employes having the highest salary in each department.

Ans ~~select fname from~~

select w. department, w.f-name, w.salary from (select max(salary) as maxsal, department from worker group by dpart) as temp Inner join worker w on temp.department = w. department and temp.maxsal = w. salary.

46 To fetch the three max salaries from a table using co-related subquery.

Ans select distinct salary from worker w1 where 3 >= (select count(distinct salary) from worker w2 where w1.salary <= w2.salary) order by w1.salary desc; OR

select distinct salary from worker order by salary desc limit 3;

47 To fetch 3 min salary from table using co-related salary.

_____ where w1.salary >= w2.salary) _____

48.) To fetch nth max salaries from a table

_____

where n >= _____

49 To fetch department along with total salaries paid for each of them.

select department, sum[salary] as dep sal from worker group by department;

50 To fetch the names of workers who earn the highest salary.

```
select first_name, salary from workers
where salary = ( select max (salary)
from workers);
```

51 Remove all the reversed pair from given table.

I/p →

A	B
1	2
2	4
2	1
3	2
4	2
5	6
6	5
7	8

reverse pair :-

1,2 → 2,1

2,3 → 3,2

O/p →

A	B
1	2
2	4
3	2
5	6
7	8

Joins

```
select lt.* from pairs lt left join
pairs rt on lt.A = rt.B and
lt.B = rt.A where rt.A is NULL
OR lt.A < rt.A.
```

OR

Co-related

```
select * from pairs p1 where not
exists (select * from pairs p2 where p1.B=p2.A
AND P1.A = P2.B AND P1.A = P2.A);
```