

# 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 suman.workers
```

Output

	worker_name character varying (25) 
1	Niharika
2	Vishal
3	Amitabh
4	Vivek
5	Vipul
6	Satish
7	Geetika
8	Monika

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

```
select upper(first_name) as worker_name from suman.workers
```

Output

	worker_name text 
1	NIHARIKA
2	VISHAL
3	AMITABH
4	VIVEK
5	VIPUL
6	SATISH
7	GEETIKA
8	MONIKA

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

```
select DISTINCT department from suman.workers
```

Output

	department character varying (25)
1	Admin
2	Account
3	HR

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

```
select SUBSTRING(first_name,1,3) from suman.workers
```

Output

	substring text
1	Nih
2	Vis
3	Ami
4	Viv
5	Vip
6	Sat
7	Gee
8	Mon

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

**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 suman.workers
```

Output

	rtrim text
1	Niharika
2	Vishal
3	Amitabh
4	Vivek
5	Vipul
6	Satish
7	Geetika
8	Monika

**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 suman.workers
```

Output

	ltrim text
1	Admin
2	HR
3	Admin
4	Admin
5	Account
6	Account
7	Admin
8	HR

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

```
SELECT DISTINCT length(department) from suman.workers
```

Output

	length integer
1	5
2	2
3	7

**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 suman.workers
```

Output

	replace text
1	NihArikA
2	VishAl
3	AmitAbh
4	Vivek
5	Vipul
6	SAtish
7	GeetikA
8	MonikA

**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  
suman.workers
```

Output

	complete_name text
1	NiharikaVerma
2	VishalSinghal
3	AmitabhSingh
4	VivekBhati
5	VipulDiwan
6	SatishKumar
7	GeetikaChauhan
8	MonikaArora

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

select first\_name from suman.workers order by first\_name asc

Output

	first_name character varying (25)
1	Amitabh
2	Geetika
3	Monika
4	Niharika
5	Satish
6	Vipul
7	Vishal
8	Vivek

**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 suman.workers order by first\_name asc, department desc

Output

	worker_id [PK] integer	first_name character varying (25)	last_name character varying (25)	salary integer	joining_date date	department character varying (25)
1	4	Amitabh	Singh	500000	2014-02-20	Admin
2	8	Geetika	Chauhan	90000	2014-04-11	Admin
3	1	Monika	Arora	100000	2014-02-20	HR
4	2	Niharika	Verma	80000	2014-06-11	Admin
5	7	Satish	Kumar	75000	2014-01-20	Account
6	6	Vipul	Diwan	200000	2014-06-11	Account
7	3	Vishal	Singhal	300000	2014-02-20	HR
8	5	Vivek	Bhati	500000	2014-06-11	Admin

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

SELECT first\_name from suman.workers where first\_name in ('Vipul','Satish')

Output

	first_name character varying (25)
1	Vipul
2	Satish

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

```
SELECT * from suman.workers except SELECT * from suman.workers
where first_name in ('Vipul','Satish')
```

Output

	worker_id integer	first_name character varying (25)	last_name character varying (25)	salary integer	joining_date date	department character varying (25)
1	1	Monika	Arora	100000	2014-02-20	HR
2	8	Geetika	Chauhan	90000	2014-04-11	Admin
3	4	Amitabh	Singh	500000	2014-02-20	Admin
4	3	Vishal	Singhal	300000	2014-02-20	HR
5	5	Vivek	Bhati	500000	2014-06-11	Admin
6	2	Niharika	Verma	80000	2014-06-11	Admin

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

```
select * FROM suman.workers where workers.department='Admin'
```

Output

	worker_id integer	first_name character varying (25)	last_name character varying (25)	salary integer	joining_date date	department character varying (25)
1	1	Monika	Arora	100000	2014-02-20	HR
2	8	Geetika	Chauhan	90000	2014-04-11	Admin
3	4	Amitabh	Singh	500000	2014-02-20	Admin
4	3	Vishal	Singhal	300000	2014-02-20	HR
5	5	Vivek	Bhati	500000	2014-06-11	Admin
6	2	Niharika	Verma	80000	2014-06-11	Admin

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

```
select * from suman.workers where first_name like '%a%'
```

Output

	worker_id [PK] integer	first_name character varying (25)	last_name character varying (25)	salary integer	joining_date date	department character varying (25)
1	2	Niharika	Verma	80000	2014-06-11	Admin
2	3	Vishal	Singhal	300000	2014-02-20	HR
3	4	Amitabh	Singh	500000	2014-02-20	Admin
4	7	Satish	Kumar	75000	2014-01-20	Account
5	8	Geetika	Chauhan	90000	2014-04-11	Admin
6	1	Monika	Arora	100000	2014-02-20	HR

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

```
select * from suman.workers where first_name like '%a'
```

Output

	worker_id [PK] integer	first_name character varying (25)	last_name character varying (25)	salary integer	joining_date date	department character varying (25)
1	2	Niharika	Verma	80000	2014-06-11	Admin
2	8	Geetika	Chauhan	90000	2014-04-11	Admin
3	1	Monika	Arora	100000	2014-02-20	HR

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

```
select * from suman.workers where first_name like '%h' and  
length(first_name)=6
```

output

	worker_id [PK] integer	first_name character varying (25)	last_name character varying (25)	salary integer	joining_date date	department character varying (25)
1	7	Satish	Kumar	75000	2014-01-20	Account

**Q-19. Write an SQL query to print details of the Workers whose SALARY lies between 100000 and 500000.**

```
select * from suman.workers where salary BETWEEN '100000' and '500000'
```

Output

	worker_id [PK] integer	first_name character varying (25)	last_name character varying (25)	salary integer	joining_date date	department character varying (25)
1	3	Vishal	Singhal	300000	2014-02-20	HR
2	4	Amitabh	Singh	500000	2014-02-20	Admin
3	5	Vivek	Bhati	500000	2014-06-11	Admin
4	6	Vipul	Diwan	200000	2014-06-11	Account
5	1	Monika	Arora	100000	2014-02-20	HR

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

Select \* from suman.Workers where EXTRACT(ISOYEAR FROM JOINING\_DATE) = 2014 and EXTRACT(MONTH FROM JOINING\_DATE) = 2;

Output

	worker_id [PK] integer	first_name character varying (25)	last_name character varying (25)	salary integer	joining_date date	department character varying (25)
1	3	Vishal	Singhal	300000	2014-02-20	HR
2	4	Amitabh	Singh	500000	2014-02-20	Admin
3	1	Monika	Arora	100000	2014-02-20	HR

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

select count(first\_name) from suman.workers where department='Admin'

Output

	count bigint
1	4

**Q-22. Write an SQL query to fetch worker names with salaries >= 50000 and <= 100000.**

select first\_name from suman.workers where salary >= 50000 and salary<= 100000

Output



	first_name character varying (25)
1	Niharika
2	Satish
3	Geetika
4	Monika

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

```
select count(first_name),department from suman.workers group by
department
```

Output

	count bigint	department character varying (25)
1	4	Admin
2	2	Account
3	2	HR

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

```
SELECT * FROM suman.workers as w INNER JOIN suman.title as ti ON
w.worker_id= ti.worker_ref_id where ti.worker_title ='Manager'
```

Output

	worker_id integer	first_name character varying (25)	last_name character varying (25)	salary integer	joining_date date	department character varying (25)	worker_ref_id integer	worker_title character varying (25)	affected_from timestamp without time zone
1	5	Vivek	Bhati	500000	2014-06-11	Admin	5	Manager	[null]
2	1	Monika	Arora	100000	2014-02-20	HR	1	Manager	[null]

**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
suman.title GROUP BY WORKER_TITLE, AFFECTED_FROM HAVING
COUNT(*) > 1;
```

Output

	worker_title character varying (25)	affected_from timestamp without time zone	count bigint
1	[null]	2016-06-11 00:00:00	7
2	Manager	[null]	2
3	Executive	[null]	3
4	Lead	[null]	2

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

```
SELECT * FROM suman.Workers WHERE MOD (WORKER_ID, 2) <> 0;
```

Output

	worker_id [PK] integer	first_name character varying (25)	last_name character varying (25)	salary integer	joining_date date	department character varying (25)
1	3	Vishal	Singhal	300000	2014-02-20	HR
2	5	Vivek	Bhati	500000	2014-06-11	Admin
3	7	Satish	Kumar	75000	2014-01-20	Account
4	1	Monika	Arora	100000	2014-02-20	HR

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

```
SELECT * FROM suman.Workers WHERE MOD (WORKER_ID, 2) = 0;
```

Output

	worker_id [PK] integer	first_name character varying (25)	last_name character varying (25)	salary integer	joining_date date	department character varying (25)
1	2	Niharika	Verma	80000	2014-06-11	Admin
2	4	Amitabh	Singh	500000	2014-02-20	Admin
3	6	Vipul	Diwan	200000	2014-06-11	Account
4	8	Geetika	Chauhan	90000	2014-04-11	Admin

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

```
CREATE TABLE suman.clone_table as TABLE suman.workers
```

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

```
select worker_id from suman.workers INTERSECT select  
bonus.worker_ref_id from suman.bonus
```

Output

	worker_id integer
1	3
2	2
3	1

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

```
SELECT
W.worker_id,W.first_name,W.last_name,W.salary,W.joining_date,W.depart
ment FROM suman.workers w,(SELECT worker_id FROM suman.Workers
EXCEPT SELECT worker_ref_id FROM suman.Bonus) B WHERE
W.worker_id = B.worker_id ;
```

Output

	worker_id [PK] integer	first_name character varying (25)	last_name character varying (25)	salary integer	joining_date date	department character varying (25)
1	5	Vivek	Bhati	500000	2014-06-11	Admin
2	4	Amitabh	Singh	500000	2014-02-20	Admin
3	6	Vipul	Diwan	200000	2014-06-11	Account
4	7	Satish	Kumar	75000	2014-01-20	Account
5	8	Geetika	Chauhan	90000	2014-04-11	Admin

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

```
select now();
```







Output

	now timestamp with time zone
1	2022-02-06 19:55:50.200614+05:45

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

```
SELECT * FROM suman.Workers ORDER BY Last_name ASC LIMIT 10;
```


Output

	 worker_id [PK] integer 	first_name character varying (25) 	last_name character varying (25) 	salary integer 	joining_date date 	department character varying (25) 
1	1	Monika	Arora	100000	2014-02-20	HR
2	5	Vivek	Bhati	500000	2014-06-11	Admin
3	8	Geetika	Chauhan	90000	2014-04-11	Admin
4	6	Vipul	Diwan	200000	2014-06-11	Account
5	7	Satish	Kumar	75000	2014-01-20	Account
6	4	Amitabh	Singh	500000	2014-02-20	Admin
7	3	Vishal	Singhal	300000	2014-02-20	HR
8	2	Niharika	Verma	80000	2014-06-11	Admin

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

```
SELECT Salary FROM suman.Workers ORDER BY Salary DESC LIMIT 1;
```


Output

	salary integer 
1	500000

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

```
SELECT Salary FROM suman.Workers W1 WHERE 4 = (SELECT COUNT(
DISTINCT ( W2.Salary ) ) FROM suman.Workers W2 WHERE W2.Salary
>= W1.Salary )
```

Output

	salary integer 
1	100000

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

```
Select distinct W.WORKER_ID, W.FIRST_NAME, W.Salary from
suman.Workers W, suman.Workers W1 where W.Salary = W1.Salary and
W.WORKER_ID != W1.WORKER_ID;
```

Output

	<b>worker_id</b> [PK] integer	<b>first_name</b> character varying (25)	<b>salary</b> integer
1	5	Vivek	500000
2	4	Amitabh	500000

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

Select max(Salary) from suman.Workers where Salary not in (Select max(Salary) from suman.Workers)

Output

	<b>max</b> integer
1	300000

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

select \* from suman.Workers W where W.DEPARTMENT='Admin'

union all

select \* from suman.Workers W1 where W1.DEPARTMENT='Admin'






Output

	<b>worker_id</b> integer	<b>first_name</b> character varying (25)	<b>last_name</b> character varying (25)	<b>salary</b> integer	<b>joining_date</b> date	<b>department</b> character varying (25)
1	2	Niharika	Verma	80000	2014-06-11	Admin
2	4	Amitabh	Singh	500000	2014-02-20	Admin
3	5	Vivek	Bhati	500000	2014-06-11	Admin
4	8	Geetika	Chauhan	90000	2014-04-11	Admin
5	2	Niharika	Verma	80000	2014-06-11	Admin
6	4	Amitabh	Singh	500000	2014-02-20	Admin
7	5	Vivek	Bhati	500000	2014-06-11	Admin
8	8	Geetika	Chauhan	90000	2014-04-11	Admin

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

(SELECT \* FROM suman.Workers) INTERSECT (SELECT \* FROM suman.clone\_table)







Output

	 worker_id integer	 first_name character varying (25)	 last_name character varying (25)	 salary integer	 joining_date date	 department character varying (25)
1	1	Monika	Arora	100000	2014-02-20	HR
2	7	Satish	Kumar	75000	2014-01-20	Account
3	4	Amitabh	Singh	500000	2014-02-20	Admin
4	8	Geetika	Chauhan	90000	2014-04-11	Admin
5	3	Vishal	Singhal	300000	2014-02-20	HR
6	5	Vivek	Bhati	500000	2014-06-11	Admin
7	2	Niharika	Verma	80000	2014-06-11	Admin
8	6	Vipul	Diwan	200000	2014-06-11	Account

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

```
SELECT * FROM suman.WORKERS WHERE WORKER_ID <= (SELECT
count(WORKER_ID)/2 from suman.Workers)
```



Output

	 worker_id [PK] integer	 first_name character varying (25)	 last_name character varying (25)	 salary integer	 joining_date date	 department character varying (25)
1	2	Niharika	Verma	80000	2014-06-11	Admin
2	3	Vishal	Singhal	300000	2014-02-20	HR
3	4	Amitabh	Singh	500000	2014-02-20	Admin
4	1	Monika	Arora	100000	2014-02-20	HR

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

```
SELECT DEPARTMENT, COUNT(WORKER_ID) as Number_of_Workers
FROM suman.Workers GROUP BY DEPARTMENT HAVING
COUNT(WORKER_ID) < 5
```

Output

	 department character varying (25)	 number_of_workers bigint
1	Admin	4
2	Account	2
3	HR	2

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

```
SELECT DEPARTMENT, COUNT(DEPARTMENT) as Number_of_Workers
FROM suman.Workers GROUP BY DEPARTMENT
```

### Output

	department character varying (25)	number_of_workers bigint
1	Admin	4
2	Account	2
3	HR	2

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

Select \* from suman.Workers where WORKER\_ID = (SELECT  
max(WORKER\_ID) from suman.Workers)

### Output

	worker_id [PK] integer	first_name character varying (25)	last_name character varying (25)	salary integer	joining_date date	department character varying (25)
1	8	Geetika	Chauhan	90000	2014-04-11	Admin

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

Select \* from suman.Workers where WORKER\_ID = (SELECT  
min(WORKER\_ID) from suman.Workers)

### Output

	worker_id [PK] integer	first_name character varying (25)	last_name character varying (25)	salary integer	joining_date date	department character varying (25)
1	1	Monika	Arora	100000	2014-02-20	HR

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

SELECT \* FROM suman.Workers WHERE WORKER\_ID <=5

UNION

SELECT \* FROM (SELECT \* FROM suman.Workers W order by  
W.WORKER\_ID ASC) AS W1 WHERE W1.WORKER\_ID <=5

### Output

	worker_id integer	first_name character varying (25)	last_name character varying (25)	salary integer	joining_date date	department character varying (25)
1	1	Monika	Arora	100000	2014-02-20	HR
2	4	Amitabh	Singh	500000	2014-02-20	Admin
3	3	Vishal	Singhal	300000	2014-02-20	HR
4	5	Vivek	Bhati	500000	2014-06-11	Admin
5	2	Niharika	Verma	80000	2014-06-11	Admin

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

```
SELECT t.DEPARTMENT,t.FIRST_NAME,t.Salary from(SELECT
max(Salary) as TotalSalary,DEPARTMENT from suman.Workers group by
DEPARTMENT) as TempNew
```

```
Inner Join suman.Workers t on TempNew.DEPARTMENT=t.DEPARTMENT
and TempNew.TotalSalary=t.Salary
```

Output

	department character varying (25)	first_name character varying (25)	salary integer
1	HR	Vishal	300000
2	Admin	Amitabh	500000
3	Admin	Vivek	500000
4	Account	Vipul	200000

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

```
SELECT distinct Salary from suman.workers a WHERE 3 >= (SELECT
count(distinct Salary) from suman.workers b WHERE a.Salary <= b.Salary)
order by a.Salary desc
```

Output

	salary integer
1	500000
2	300000
3	200000

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

```
SELECT distinct Salary from suman.workers a WHERE 3 >= (SELECT
count(distinct Salary) from suman.workers b WHERE a.Salary >= b.Salary)
order by a.Salary desc
```

Output



	salary integer
1	90000
2	80000
3	75000

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

```
SELECT distinct Salary from suman.workers a WHERE 8 >= (SELECT
count(distinct Salary) from suman.workers b WHERE a.Salary <= b.Salary)
order by a.Salary desc
```

Output

	salary integer
1	500000
2	300000
3	200000
4	100000
5	90000
6	80000
7	75000

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

```
SELECT DEPARTMENT, sum(Salary) from suman.workers group by
DEPARTMENT
```



Output

	department character varying (25)	sum bigint
1	Admin	1170000
2	Account	275000
3	HR	400000

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

```
SELECT FIRST_NAME, SALARY from suman.Workers WHERE
SALARY=(SELECT max(SALARY) from suman.Workers)
```

Output

	<b>first_name</b> character varying (25) 	<b>salary</b> integer 
1	Amitabh	500000
2	Vivek	500000