### 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



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



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

#### select DISTINCT department from suman.workers

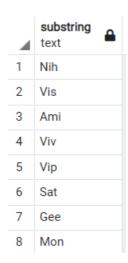
Output

4	department character varying (25)	<u></u>
1	Admin	
2	Account	
3	HR	

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

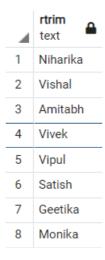
select SUBSTRING(first\_name,1,3) from suman.workers

Output



- 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



### 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

Itrim text
Admin
HR
Admin
Admin
Account
Account
Admin
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

4	length integer	<u></u>
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

Carpar					
4	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

4	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



### 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

4	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')



### 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

4	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

4	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%'

4	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

4	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

4	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'

4	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
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;

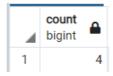
#### Output

4	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



### 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

4	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

4	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

4	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	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;

4	worker_title character varying (25)	affected_from timestamp without time zone	<b>count</b> 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

4	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

4	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

4	worker_id integer	<u></u>
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;

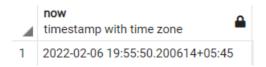
#### Output

4	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



#### 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;

4	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;

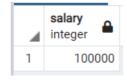




### Q-34. Write an SQL query to determine the 5th highest salary without using TOP or limit method.

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

Output



## 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;

4	worker_id [PK] integer	first_name character varying (25)	salary 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

4	max integer	
1	300	000

#### 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

4	worker_id 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	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)

4	worker_id integer	first_name character varying (25)	last_name character varying (25)	salary integer	<b>joining_date</b> 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

4	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

4	department character varying (25)	<u></u>	number_of_workers bigint	<u></u>
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

4	department character varying (25)	<u></u>	number_of_workers bigint	<u></u>
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

4	worker_id [PK] integer	first_name character varying (25)	last_name character varying (25)	salary integer	joining_date date	department character varying (25)	<b>G</b>
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

4	worker_id [PK] integer	<b>A</b>	first_name character varying (25)	last_name character varying (25)	•	salary integer	joining_date date	department character varying (25)	2.0
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

4	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						
4	department character varying (25)	<u> </u>	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

4	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

4	salary integer	
1	90	000
2	80	000
3	75	000

#### 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

4	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

4	department character varying (25)	<b>sum</b> bigint	
1	Admin	1170	000
2	Account	275	000
3	HR	400	000

### 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)

4	first_name character varying (25)	<u></u>	salary integer	•
1	Amitabh		500	000
2	Vivek		500	000