**SQL Exercise**

1. List of the employees who are working on BRO Recruitment project.

Query-

select distinct

e.emp\_first\_name,

ep.emp\_project\_id,

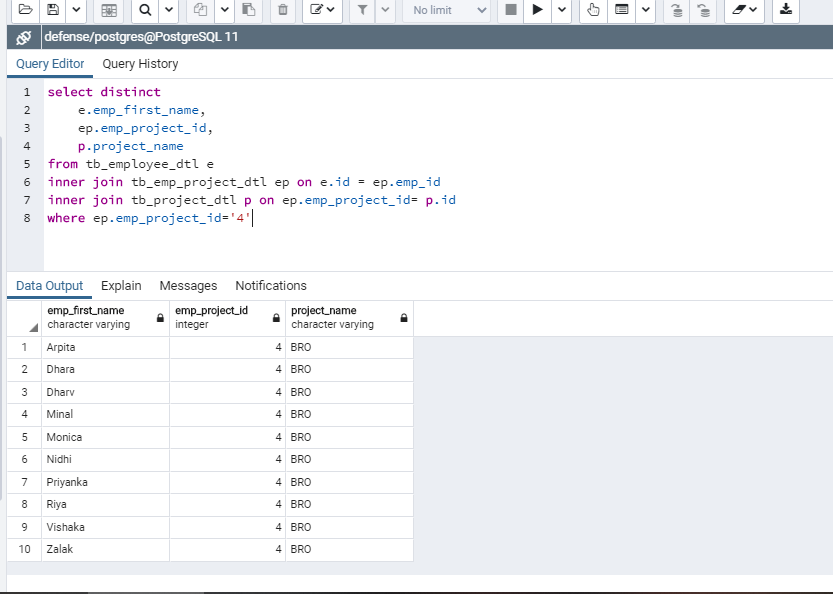
p.project\_name

from tb\_employee\_dtl e

inner join tb\_emp\_project\_dtl ep on e.id = ep.emp\_id

inner join tb\_project\_dtl p on ep.emp\_project\_id= p.id

where ep.emp\_project\_id='4'



2. List of the employees who are not working on EME Project.

Query-

select distinct

e.emp\_first\_name,

ep.emp\_project\_id,

p.project\_name

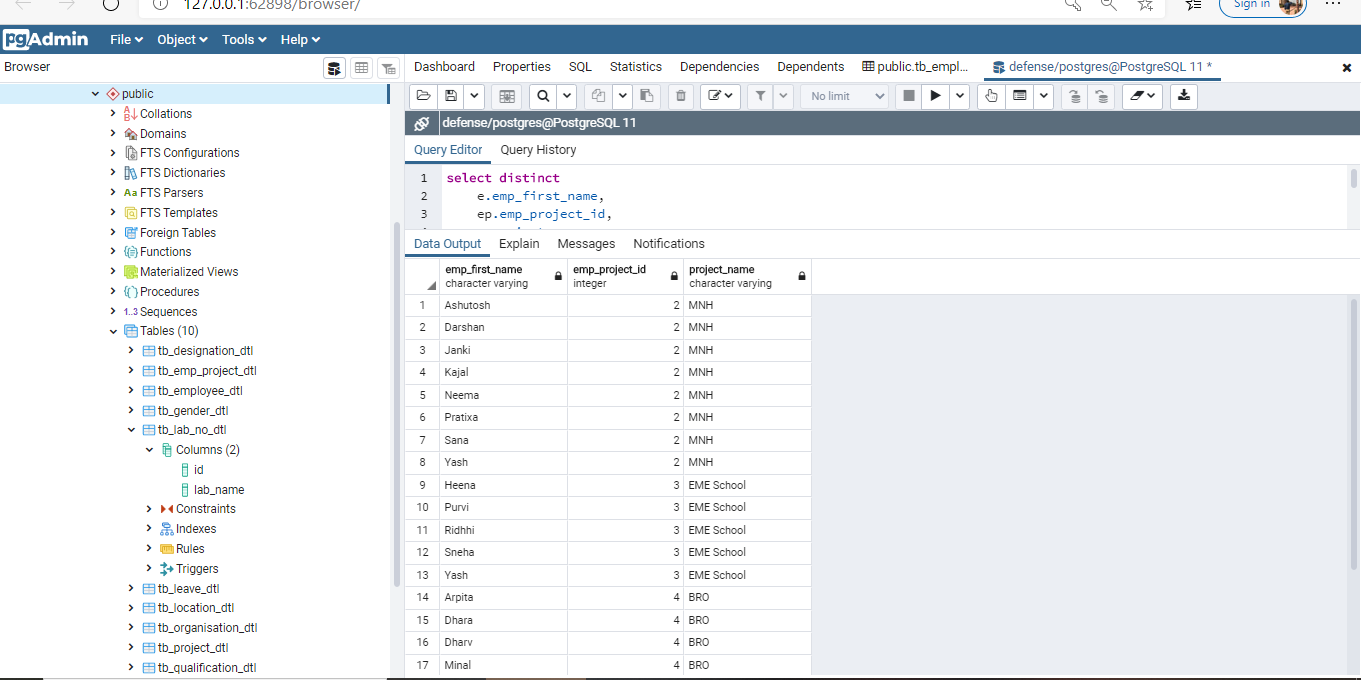
from tb\_employee\_dtl e

inner join tb\_emp\_project\_dtl ep on e.id = ep.emp\_id

inner join tb\_project\_dtl p on ep.emp\_project\_id= p.id

where ep.emp\_project\_id != '1'

order by ep.emp\_project\_id



3. List of the employees whose experience is more or equal to 2 years in descending order.

Query –

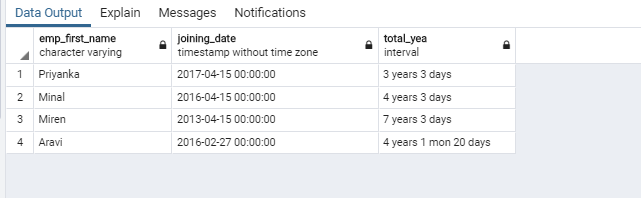
SELECT emp\_first\_name,

joining\_date,

age(CURRENT\_DATE, joining\_date) as total\_yea

FROM tb\_employee\_dtl

WHERE EXTRACT(YEAR FROM age(CURRENT\_DATE, joining\_date)) >= 2



4. List of the employees whose salary is less than 20,000 Rs.

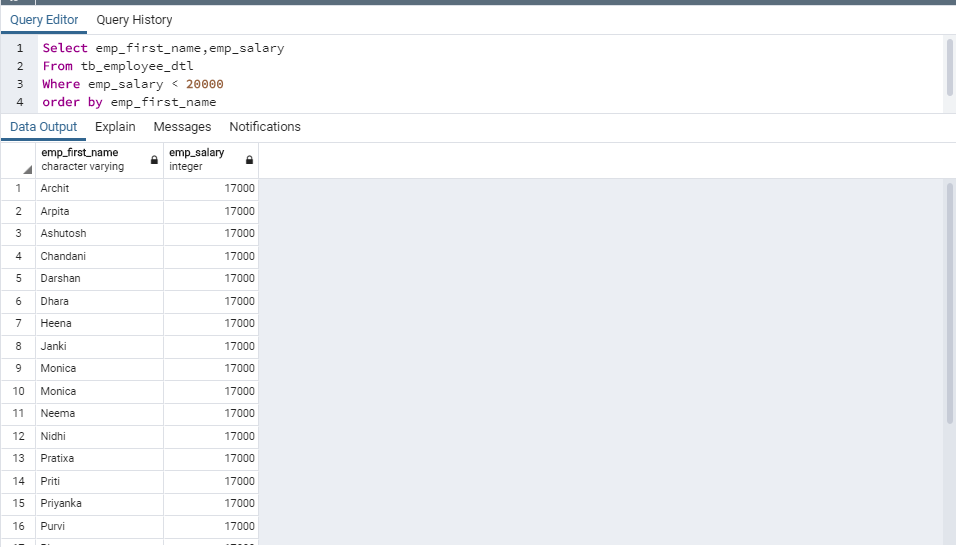
Query-

Select emp\_first\_name,emp\_salary

From tb\_employee\_dtl

Where emp\_salary < 20000

order by emp\_first\_name



5. List of the employees whose salary is more than 20,000 Rs.

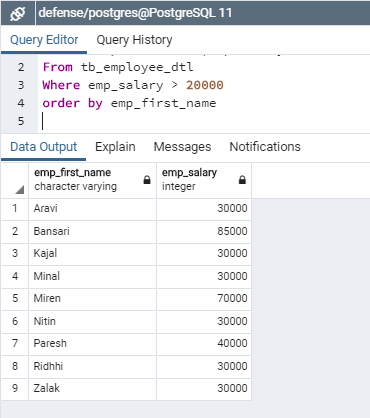
Query-

Select emp\_first\_name,emp\_salary

From tb\_employee\_dtl

Where emp\_salary > 20000

order by emp\_first\_name



6. List of the employees whose salary in between of 10,000 to 50,000 Rs.

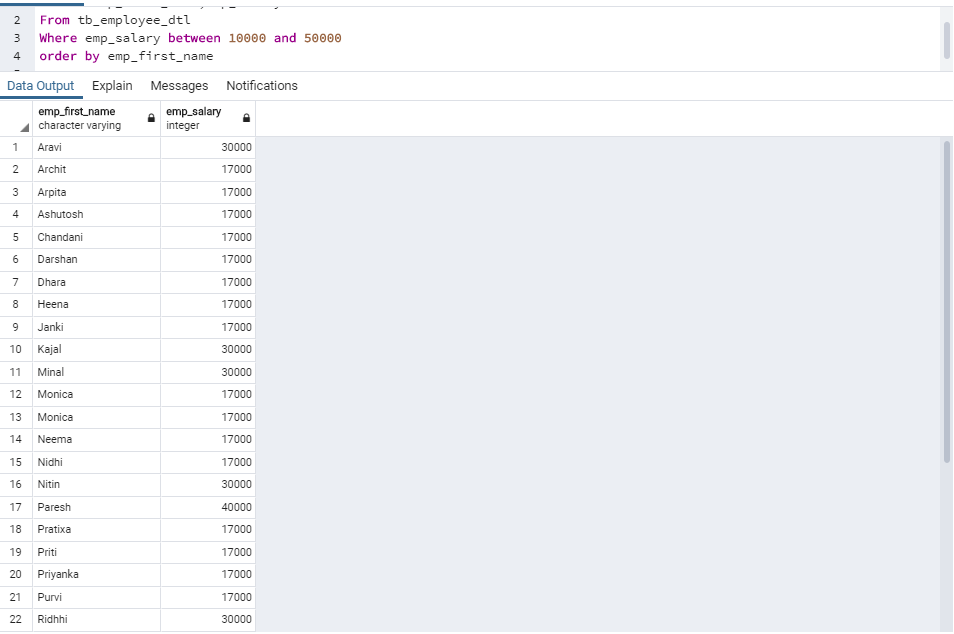
Query-

Select emp\_first\_name,emp\_salary

From tb\_employee\_dtl

Where emp\_salary between 10000 and 50000

order by emp\_first\_name

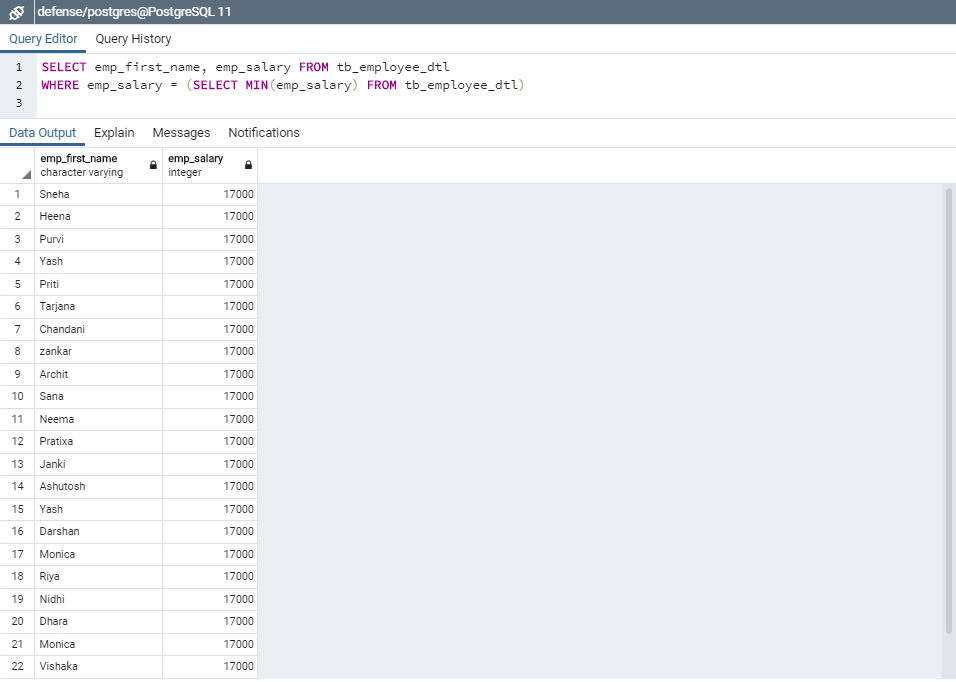


7. List the employee who has minimum salary.

Query-

SELECT emp\_first\_name, emp\_salary FROM tb\_employee\_dtl

WHERE emp\_salary = (SELECT MIN(emp\_salary) FROM tb\_employee\_dtl)

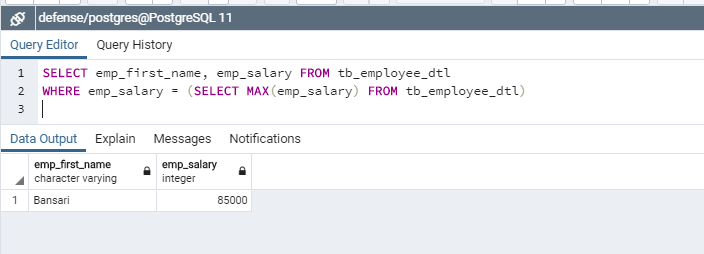


8. List the employee who has maximum salary.

Query-

SELECT emp\_first\_name, emp\_salary FROM tb\_employee\_dtl

WHERE emp\_salary = (SELECT MAX(emp\_salary) FROM tb\_employee\_dtl)

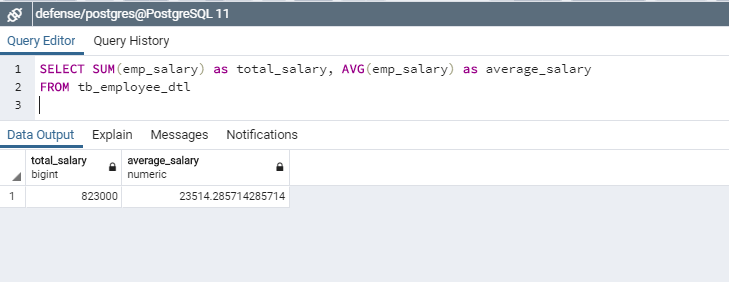


9. Total salary of all employees and average salary of each employee.

Query-

SELECT SUM(emp\_salary) as total\_salary, AVG(emp\_salary) as average\_salary

FROM tb\_employee\_dtl



10. List of the employees who are working on diff. project to be mention project name in ascending order and employees name in descending order.

Query-

select distinct

e.emp\_first\_name,

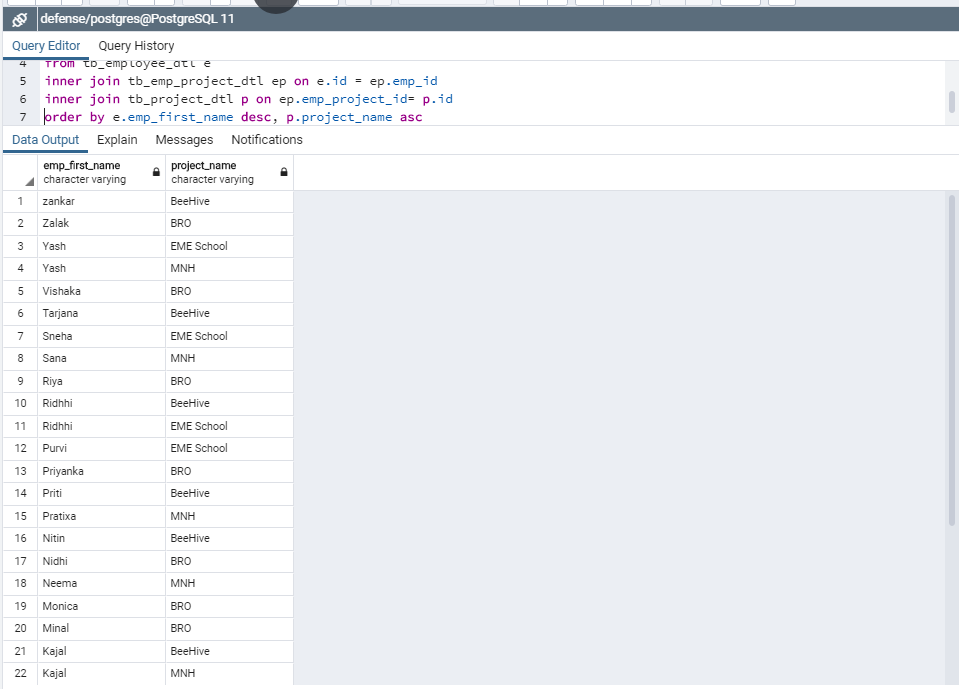
p.project\_name

from tb\_employee\_dtl e

inner join tb\_emp\_project\_dtl ep on e.id = ep.emp\_id

inner join tb\_project\_dtl p on ep.emp\_project\_id= p.id

order by e.emp\_first\_name desc, p.project\_name asc



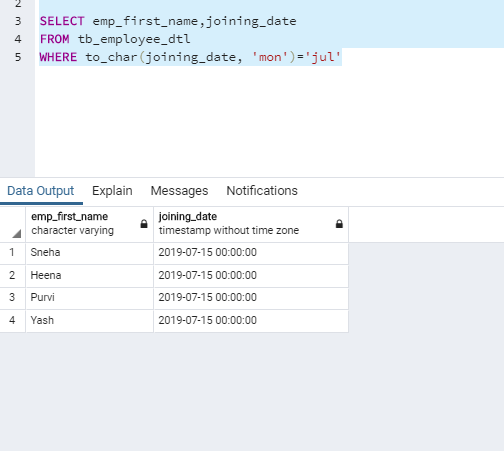
11. List of the employees who joined in the month of July.

Query -

SELECT emp\_first\_name,joining\_date

FROM tb\_employee\_dtl

WHERE to\_char(joining\_date, 'mon')='jul'

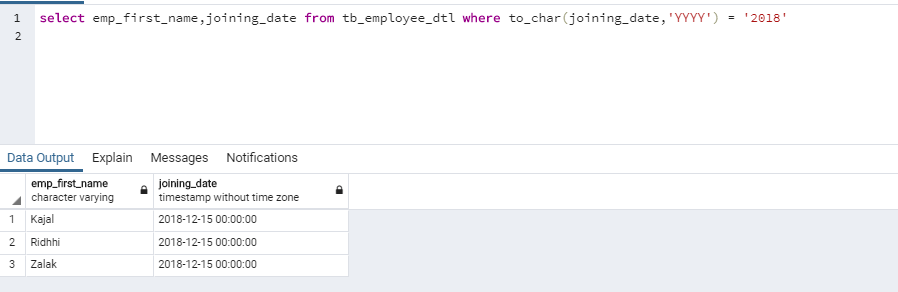


12. List of the employees who joined in the year of 2018.

­­ Query –

select emp\_first\_name, joining\_date from tb\_employee\_dtl

where to\_char(joining\_date,'YYYY') = '2018'



13. List of the employees who are resident of Gandhinagar.

Query –

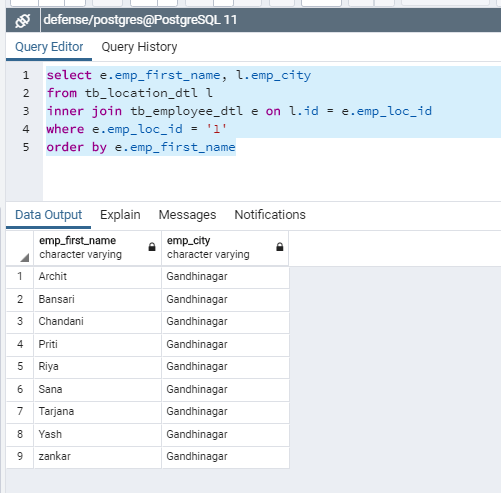
select e.emp\_first\_name, l.emp\_city

from tb\_location\_dtl l

inner join tb\_employee\_dtl e on l.id = e.emp\_loc\_id

where e.emp\_loc\_id = '1'

order by e.emp\_first\_name



14. List of the employees who up down from different cities to Gandhinagar. (mention cities name)

Query –

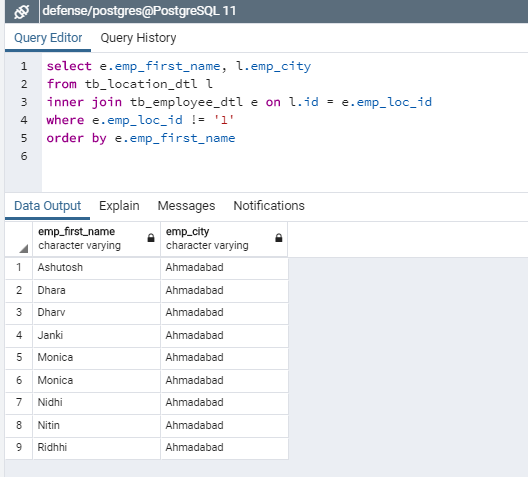
select e.emp\_first\_name, l.emp\_city

from tb\_location\_dtl l

inner join tb\_employee\_dtl e on l.id = e.emp\_loc\_id

where e.emp\_loc\_id != '1'

order by e.emp\_first\_name



15. No. of Employees based on their technical Qualification(Graduate/Post Graduate)

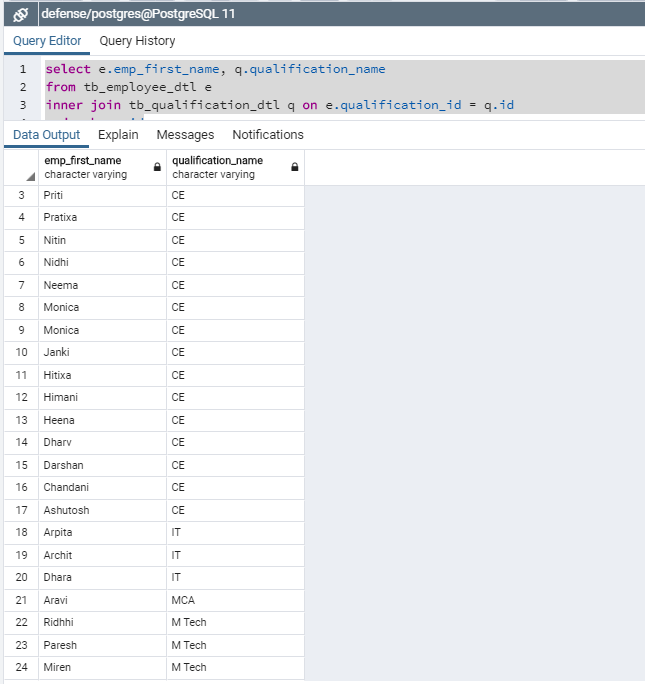
Query-

select e.emp\_first\_name, q.qualification\_name

from tb\_employee\_dtl e

inner join tb\_qualification\_dtl q on e.qualification\_id = q.id

order by q.id



16. The Number of employees in each project where less than 5 number of employees.

Query –

select

count(ep.emp\_id) as emp\_count,

ep.emp\_project\_id,

p.project\_name

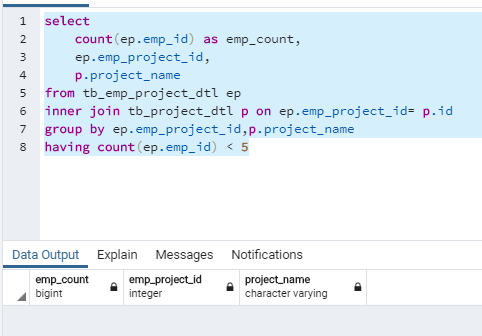
from tb\_emp\_project\_dtl ep

inner join tb\_project\_dtl p on ep.emp\_project\_id= p.id

group by ep.emp\_project\_id,p.project\_name

having count(ep.emp\_id) < 5

(NOTE: NOW NO ONE PROJECT HAS NO OF EMPLOYEE LESS THAN FIVE THAT’S WHY RESULT IS EMPTY)



17. List the Team Leader name, Project Name and numbers of employees working for those team leaders in ascending order on team leader ID.

Query –

select distinct e.id,e.emp\_first\_name, a.emp\_count,

p.project\_name

from tb\_emp\_project\_dtl ep

inner join tb\_project\_dtl p on ep.emp\_project\_id= p.id

inner join tb\_employee\_dtl e on ep.emp\_id = e.id

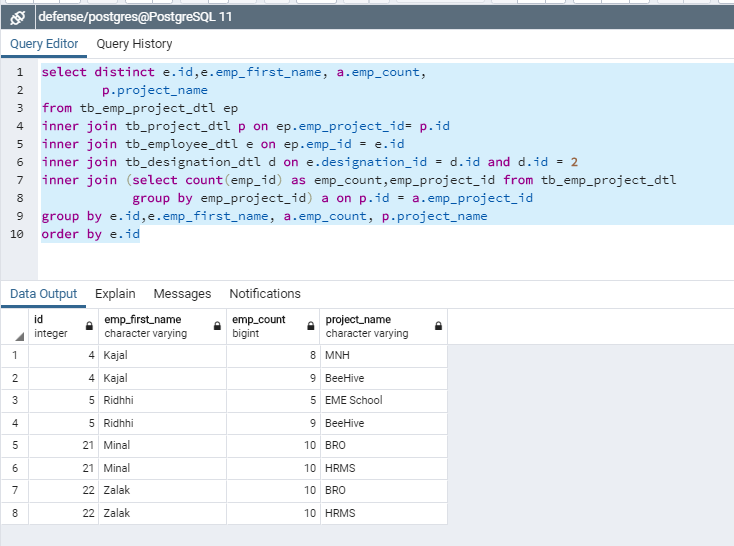
inner join tb\_designation\_dtl d on e.designation\_id = d.id and d.id = 2

inner join (select count(emp\_id) as emp\_count,emp\_project\_id from tb\_emp\_project\_dtl

group by emp\_project\_id) a on p.id = a.emp\_project\_id

group by e.id,e.emp\_first\_name, a.emp\_count, p.project\_name

order by e.id



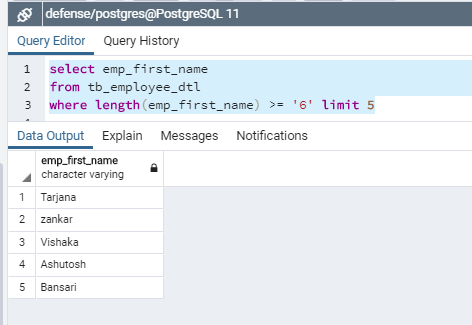
18. List of the employees whose name having more or equal to six characters limit to 5 employees.

Query –

select emp\_first\_name

from tb\_employee\_dtl

where length(emp\_first\_name) >= '6' limit 5



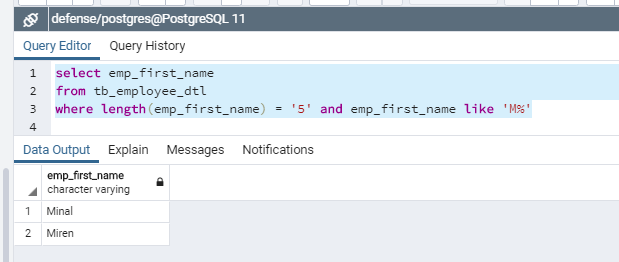
19. List of the employees whose name start with ‘M’ and with 5 Characters in their name.

Query –

select emp\_first\_name

from tb\_employee\_dtl

where length(emp\_first\_name) = '5' and emp\_first\_name like 'M%'



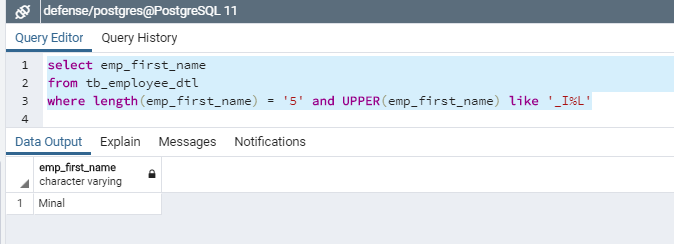
20. List of the employees whose name having 5 Characters in name, 2nd Character must be ‘I’ and end character to be ‘L’.

Query –

select emp\_first\_name

from tb\_employee\_dtl

where length(emp\_first\_name) = '5' and UPPER(emp\_first\_name) like '\_I%L'



21. List all the employees with thier Designation as a team lead/Senior developer in Ascending Order.

Query –

select distinct e.emp\_first\_name,

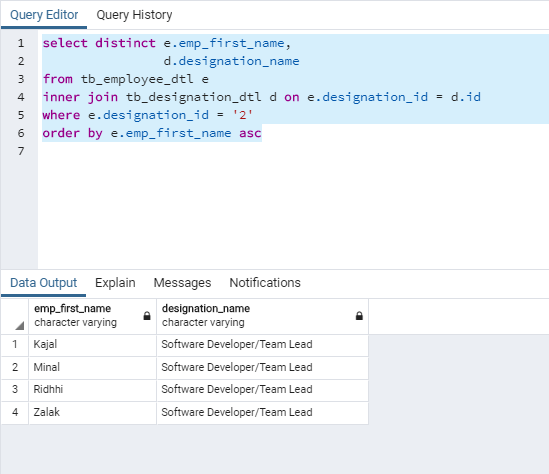
d.designation\_name

from tb\_employee\_dtl e

inner join tb\_designation\_dtl d on e.designation\_id = d.id

where e.designation\_id = '2'

order by e.emp\_first\_name asc



22. List all the Detail of employees like Age, Salary, Experience who is from Ethos and Ncog and having experience more than one year.

Query –

SELECT e.emp\_first\_name,e.emp\_salary, e.joining\_date,

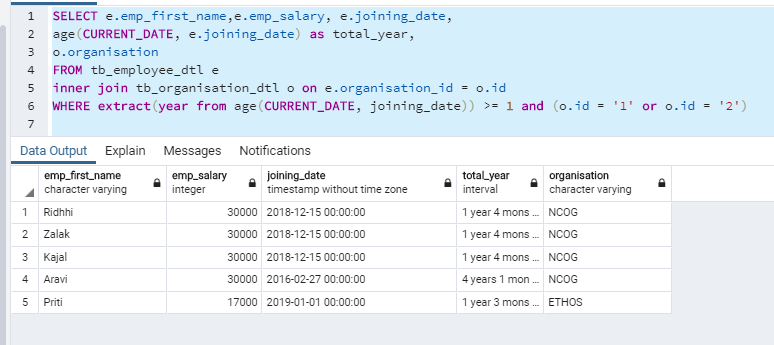
age(CURRENT\_DATE, e.joining\_date) as total\_year,

o.organisation

FROM tb\_employee\_dtl e

inner join tb\_organisation\_dtl o on e.organisation\_id = o.id

WHERE extract(year from age(CURRENT\_DATE, joining\_date)) >= 1 and (o.id = '1' or o.id = '2')



23. List all the Employees whose Name Start with (A,M,K,P) and end with (N,L,H) in Descending Order.

Query –

select emp\_first\_name

from tb\_employee\_dtl

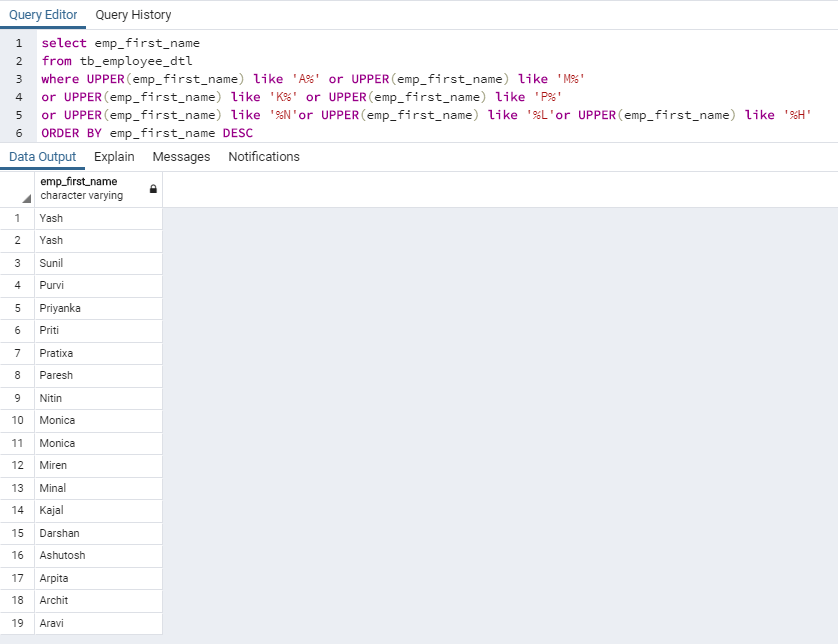
where UPPER(emp\_first\_name) like 'A%'

or UPPER(emp\_first\_name) like 'M%'

or UPPER(emp\_first\_name) like 'K%' or UPPER(emp\_first\_name) like 'P%'

or UPPER(emp\_first\_name) like '%N'or UPPER(emp\_first\_name) like '%L'or UPPER(emp\_first\_name) like '%H'

ORDER BY emp\_first\_name DESC



24. Find the number of counts of Employees in all Projects(Project wise count of employees).

Query –

select

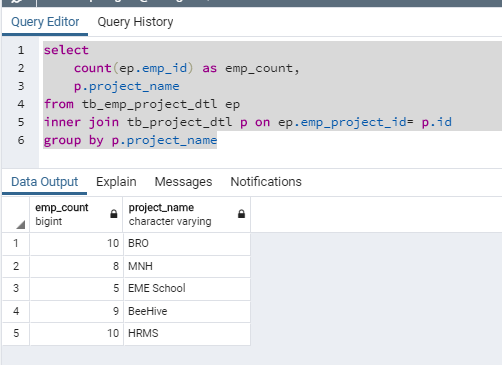
count(ep.emp\_id) as emp\_count,

p.project\_name

from tb\_emp\_project\_dtl ep

inner join tb\_project\_dtl p on ep.emp\_project\_id= p.id

group by p.project\_name



25. Write a SQL query to fetch Details Project Name,Employee name whose Designation is Team Leaders and counts of Employee under them.

Query –

select distinct p.project\_name,e.emp\_first\_name as team\_leader, a.emp\_count as team\_size

from tb\_emp\_project\_dtl ep

inner join tb\_project\_dtl p on ep.emp\_project\_id= p.id

inner join tb\_employee\_dtl e on ep.emp\_id = e.id

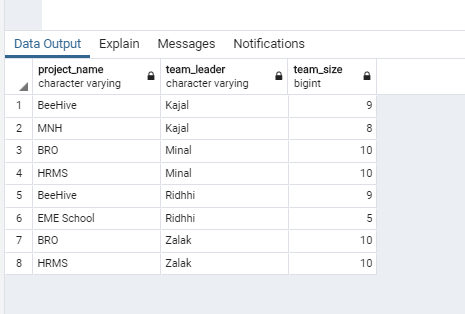
inner join tb\_designation\_dtl d on e.designation\_id = d.id and d.id = 2

inner join (select count(emp\_id) as emp\_count,emp\_project\_id from tb\_emp\_project\_dtl

group by emp\_project\_id) a on p.id = a.emp\_project\_id

group by e.emp\_first\_name, a.emp\_count, p.project\_name

order by e.emp\_first\_name



26. Find the details of the Team Leaders like his/her Name ,Age, organization, designation, salary, Experience and also they have more than one project.

Query –

select e.emp\_first\_name as team\_leader,

EXTRACT(YEAR FROM age(CURRENT\_DATE, e.emp\_dob)) as emp\_age,

o.organisation,

d.designation\_name,

e.emp\_salary,

(age(CURRENT\_DATE, e.joining\_date)) as experience

from tb\_employee\_dtl e

inner join tb\_organisation\_dtl o on e.organisation\_id = o.id

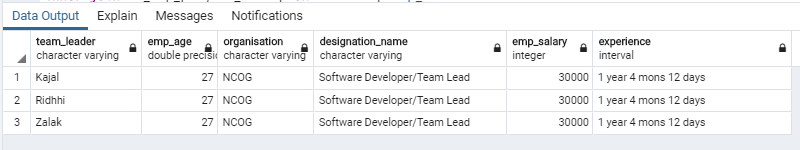
inner join tb\_designation\_dtl d on e.designation\_id = d.id and d.id = 2

inner join (select count(emp\_project\_id) as emp\_count,emp\_id from tb\_emp\_project\_dtl

group by emp\_id

having count(distinct emp\_project\_id) > 1) a on e.id = a.emp\_id

order by e.emp\_first\_name

****

27. Write a query to fetch details of all employees excluding the employees who have less than one year of Experience.

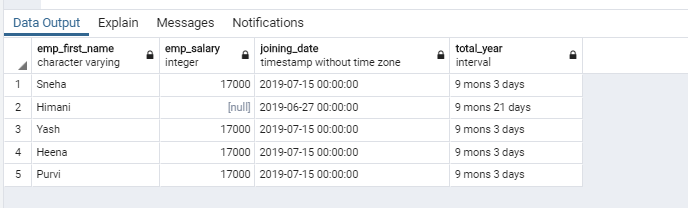
Query -

SELECT emp\_first\_name,emp\_salary, joining\_date,

age(CURRENT\_DATE, joining\_date) as total\_year

FROM tb\_employee\_dtl

WHERE extract(year from age(CURRENT\_DATE, joining\_date)) < 1



28. Write a query to fetch details of 5 Highest Experience having qualification in M.Tech/MCA and age should be greater than 25.

(Use Limit).

Query –

select e.emp\_first\_name,q.qualification\_name,e.emp\_dob,

EXTRACT(YEAR FROM age(CURRENT\_DATE, e.emp\_dob)) as b\_year,

extract(year from age(CURRENT\_DATE, joining\_date)) as experience

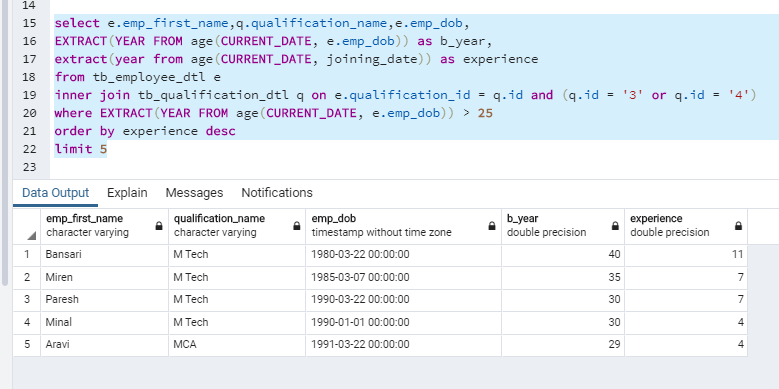
from tb\_employee\_dtl e

inner join tb\_qualification\_dtl q on e.qualification\_id = q.id and (q.id = '3' or q.id = '4')

where EXTRACT(YEAR FROM age(CURRENT\_DATE, e.emp\_dob)) > 25

order by experience desc

limit 5



29. List of all the Employees with their name and Organization having total leaves of current Year is greater than 15 days and display result in ascending order of total leaves count.

Query –

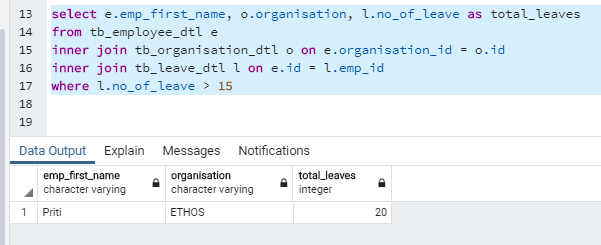
select e.emp\_first\_name, o.organisation, l.no\_of\_leave as total\_leaves

from tb\_employee\_dtl e

inner join tb\_organisation\_dtl o on e.organisation\_id = o.id

inner join tb\_leave\_dtl l on e.id = l.emp\_id

where l.no\_of\_leave > 15



30. Write a query to fetch details that capture number of the leaves of all the employees of last month and it should be organization wise.

Query –

select distinct e.emp\_first\_name,

(select sum(l.no\_of\_leave) from tb\_organisation\_dtl o

inner join tb\_leave\_dtl l on e.id = l.emp\_id and e.organisation\_id = o.id

where e.organisation\_id = '1'

) as ncog,

(select sum(l.no\_of\_leave) from tb\_organisation\_dtl o

inner join tb\_leave\_dtl l on e.id = l.emp\_id

and e.organisation\_id = o.id

where e.organisation\_id = '2'

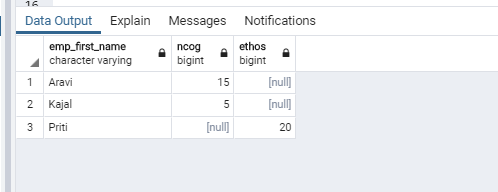
) as ethos

from tb\_leave\_dtl l

inner join tb\_employee\_dtl e on e.id = l.emp\_id

inner join tb\_organisation\_dtl o on e.organisation\_id = o.id

where extract(month from leave\_to) = extract(month from(CURRENT\_DATE - INTERVAL '1' MONTH))



31. Write a query to fetch details Project wise like this for all Projects w.r.t the Number of Employees with their Highest Qualification and also include Security and Casual labors as a Other in Project Name.

Query –

select distinct p.project\_name,

(select count(ep.emp\_project\_id) from tb\_employee\_dtl e

inner join tb\_emp\_project\_dtl ep on e.id = ep.emp\_id

and ep.emp\_project\_id = p.id

where e.qualification\_id = '1') as ce,

(select count(ep.emp\_project\_id) from tb\_employee\_dtl e

inner join tb\_emp\_project\_dtl ep on e.id = ep.emp\_id

and ep.emp\_project\_id = p.id

where e.qualification\_id = '2') as it,

(select count(ep.emp\_project\_id) from tb\_employee\_dtl e

inner join tb\_emp\_project\_dtl ep on e.id = ep.emp\_id

and ep.emp\_project\_id = p.id

where e.qualification\_id = '3') as mca,

(select count(ep.emp\_project\_id) from tb\_employee\_dtl e

inner join tb\_emp\_project\_dtl ep on e.id = ep.emp\_id

and ep.emp\_project\_id = p.id

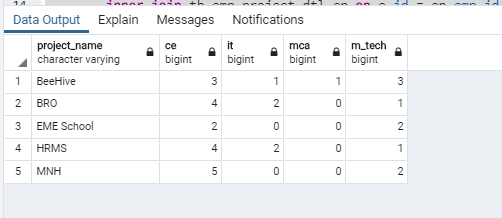
where e.qualification\_id = '4') as m\_tech

from tb\_project\_dtl p

inner join tb\_emp\_project\_dtl ep on p.id = ep.emp\_project\_id

inner join tb\_employee\_dtl e on ep.emp\_id = e.id

order by p.project\_name



32. Name of Employee with Designation who is in multiple Projects(Exclude the Employee who is in single project) with Project Name. Conditions Applied Duplication of Employee Name but Not Project Name:

Query –

select

e.emp\_first\_name,

d.designation\_name,

p.project\_name

from tb\_employee\_dtl e

inner join tb\_emp\_project\_dtl ep on e.id = ep.emp\_id

inner join tb\_project\_dtl p on ep.emp\_project\_id = p.id

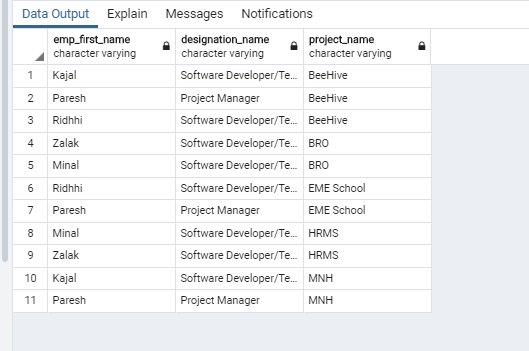
inner join tb\_designation\_dtl d on e.designation\_id = d.id

where

ep.emp\_project\_id in (select emp\_project\_id from tb\_emp\_project\_dtl group by emp\_project\_id

having count(distinct emp\_id) > 1)

order by p.project\_name



33. Create a Query which Display Name of Employee with Experience and their Designation will be based on this cases:

Case 1 :Employee whose

Experience > 8 and Qualification B.tech/M.tech is Project Manager

Case 2 :Employee whose

Experience > 6 and Qualification M.tech/MCA is Project Technical head.

Case 3 :Employee whoseExperience >= 2 and Experience <= 6 and Qualification M.tech/MCA/B.Tech is Team Leaders.

Case 4 :Employee whose

Experience >= 1 and Experience <= 2 and Qualification B.Tech is Developers.

Case 5 :Employee whose

Experience < 1 Qualification B.Tech/BCA is Junior Developers.

Case 6 :Employee whose

Experience > 3 Qualification Diploma is Network Group.

Case 7 :

Remaining are falls into “Others”

Query –

select distinct emp\_first\_name, age(CURRENT\_DATE, joining\_date) as experience,

(case

when qualification\_id = 4 and

experience > 8 then 'Project Manager'

when qualification\_id in (4,3) and

experience > 6 then 'Technical head'

when qualification\_id in (4,3,2,1) and

experience >=2 and experience <=6 then 'Team Leaders'

when qualification\_id in (4,3,2,1) and

experience >=1 and experience <=2 then 'Developers'

when qualification\_id in (3,2,1) and

experience < 1 then 'Junior Developers'

when qualification\_id = 5 and

experience > 3 then 'Network Group'

else 'Other' end ) as Designation

from (select e.joining\_date,e.qualification\_id,e.emp\_first\_name,extract(year from age(CURRENT\_DATE, e.joining\_date)) as experience

from tb\_employee\_dtl e ) as foo

where experience is not null

order by Designation

