create table schoolmanagement

(school\_name varchar(50),

school\_address varchar(60),

ranking int);

insert into schoolmanagement

(school\_name,school\_address,ranking)

values

('krmm mat hr sec school','98f cannal bank road adyar chennai-20',33);

select \*from schoolmanagement

create table Result

(student\_id serial,

subject\_id serial,

result\_date varchar(50),

mark int,

result\_year varchar(50));

insert into Result

(student\_id,subject\_id,result\_date,mark,result\_year)

values

(101,0233,'22july2023',80,'pass');

insert into Result

(student\_id,subject\_id,result\_date,mark,result\_year)

values

(102,0233,'22july2023',50,'pass');

insert into Result

(student\_id,subject\_id,result\_date,mark,result\_year)

values

(103,0233,'22july2023',85,'pass');

insert into Result

(student\_id,subject\_id,result\_date,mark,result\_year)

values

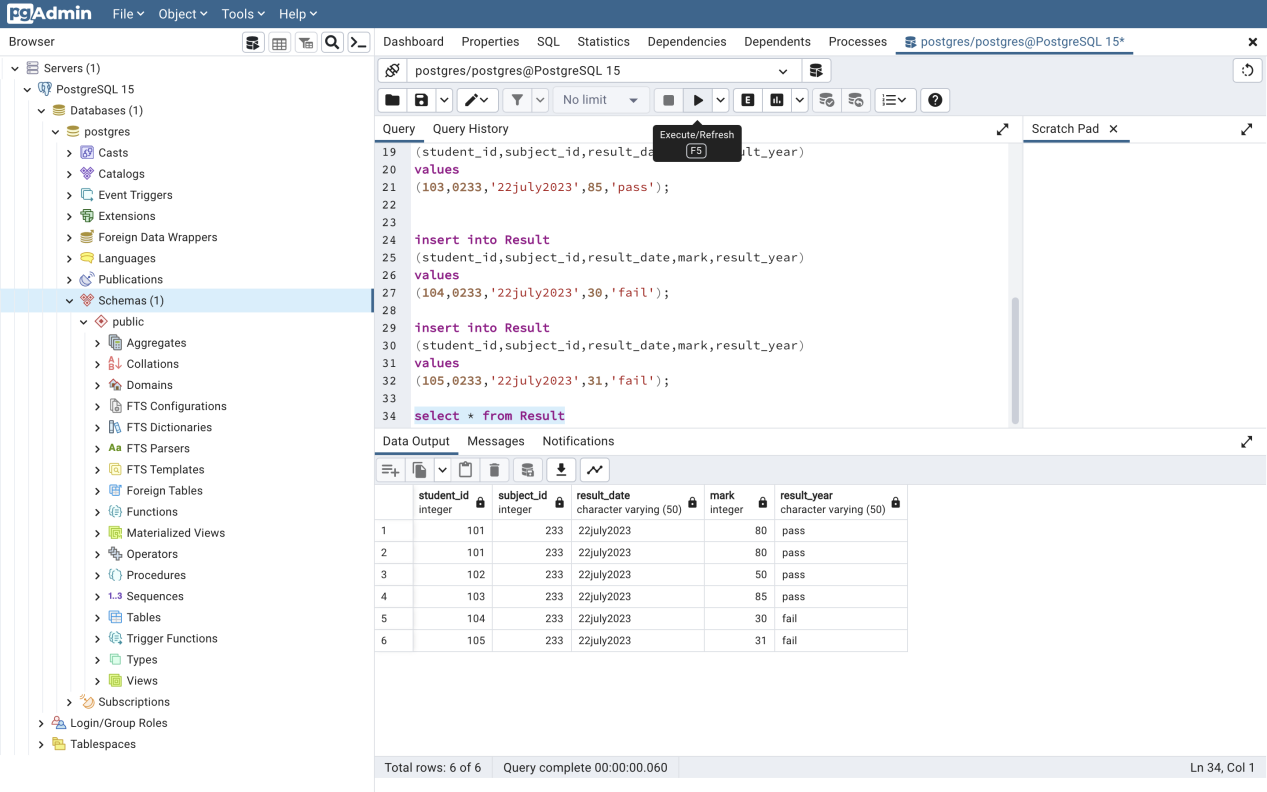
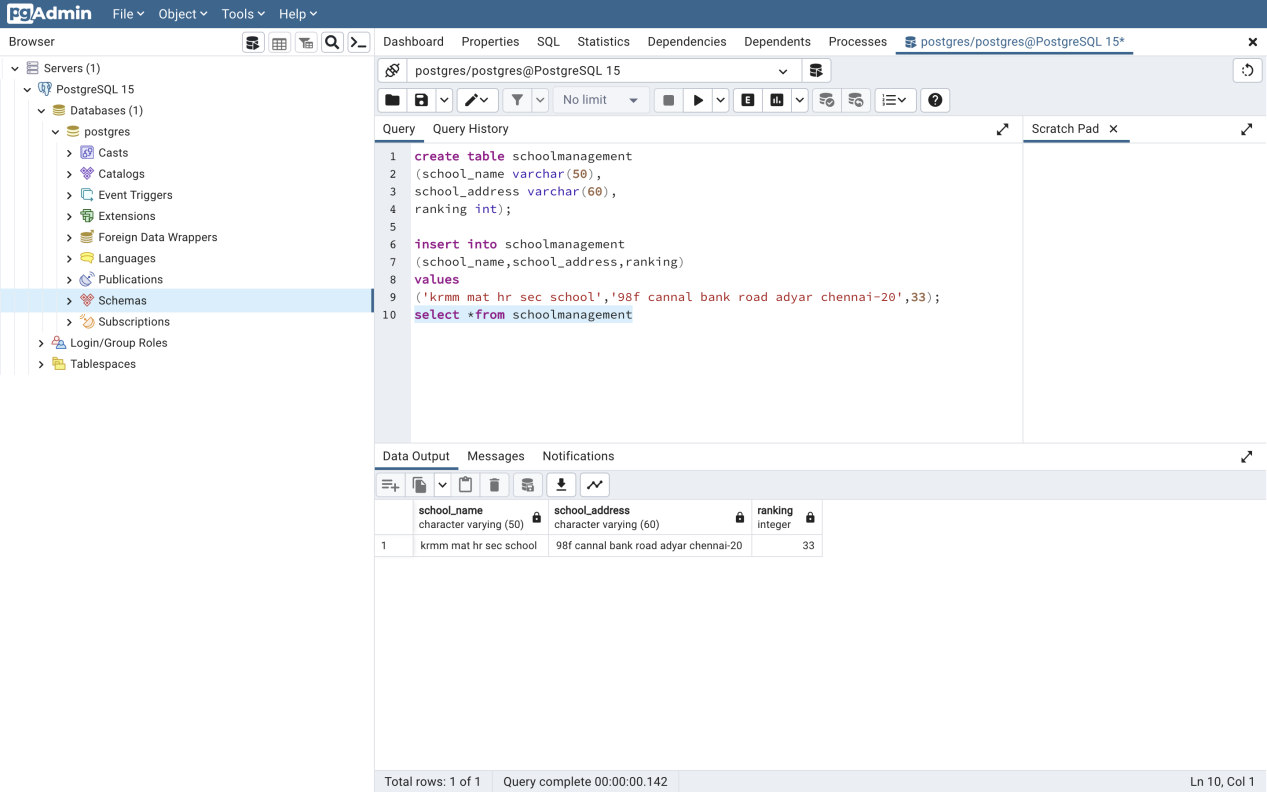
(104,0233,'22july2023',30,'fail');

insert into Result

(student\_id,subject\_id,result\_date,mark,result\_year)

values

(105,0233,'22july2023',31,'fail');

Select\*from Result 

create table Attendance

(student\_id serial,

attendance\_date varchar(50),

No\_of\_absent int,

total\_no\_of\_present int,

percentage varchar(50));

insert into Attendance

(student\_id,attendance\_date,No\_of\_absent,total\_no\_of\_present,percentage)

values

(101,'20july2023',2,30,'90%');

insert into Attendance

(student\_id,attendance\_date,No\_of\_absent,total\_no\_of\_present,percentage)

values

(102,'20june,21july,3auguest',2,30,'84%');

insert into Attendance

(student\_id,attendance\_date,No\_of\_absent,total\_no\_of\_present,percentage)

values

(103,'20june',1,30,'98%');

insert into Attendance

(student\_id,attendance\_date,No\_of\_absent,total\_no\_of\_present,percentage)

values

(104,'20july2023',2,30,'90%');

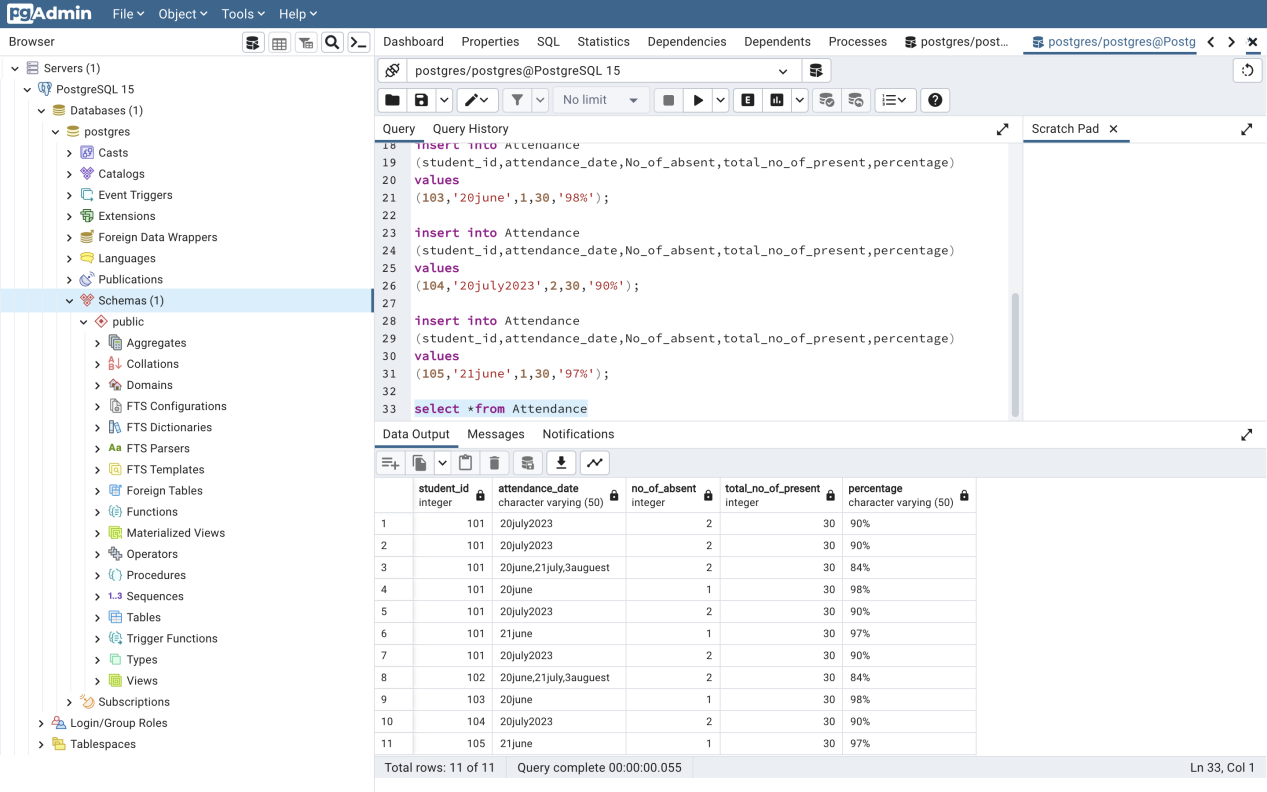
insert into Attendance

(student\_id,attendance\_date,No\_of\_absent,total\_no\_of\_present,percentage)

values

(105,'21june',1,30,'97%');

select \*from Attendance



create table Admistion

(classes varchar(50),

feels\_details varchar(50),

date\_of\_joining varchar(50),

student\_id int,

rules\_of\_regulation varchar(50));

insert into Admistion

(classes,feels\_details,date\_of\_joining,student\_id,rules\_of\_regulation)

values

('10B','10 30000','20july2009',101,'');

insert into Admistion

(classes,feels\_details,date\_of\_joining,student\_id,rules\_of\_regulation)

values

('10B','10 30000','20july2009',102,'');

insert into Admistion

(classes,feels\_details,date\_of\_joining,student\_id,rules\_of\_regulation)

values

('10B','10 30000','21july2009',103,'');

insert into Admistion

(classes,feels\_details,date\_of\_joining,student\_id,rules\_of\_regulation)

values

('10B','10 30000','20july2009',104,'');

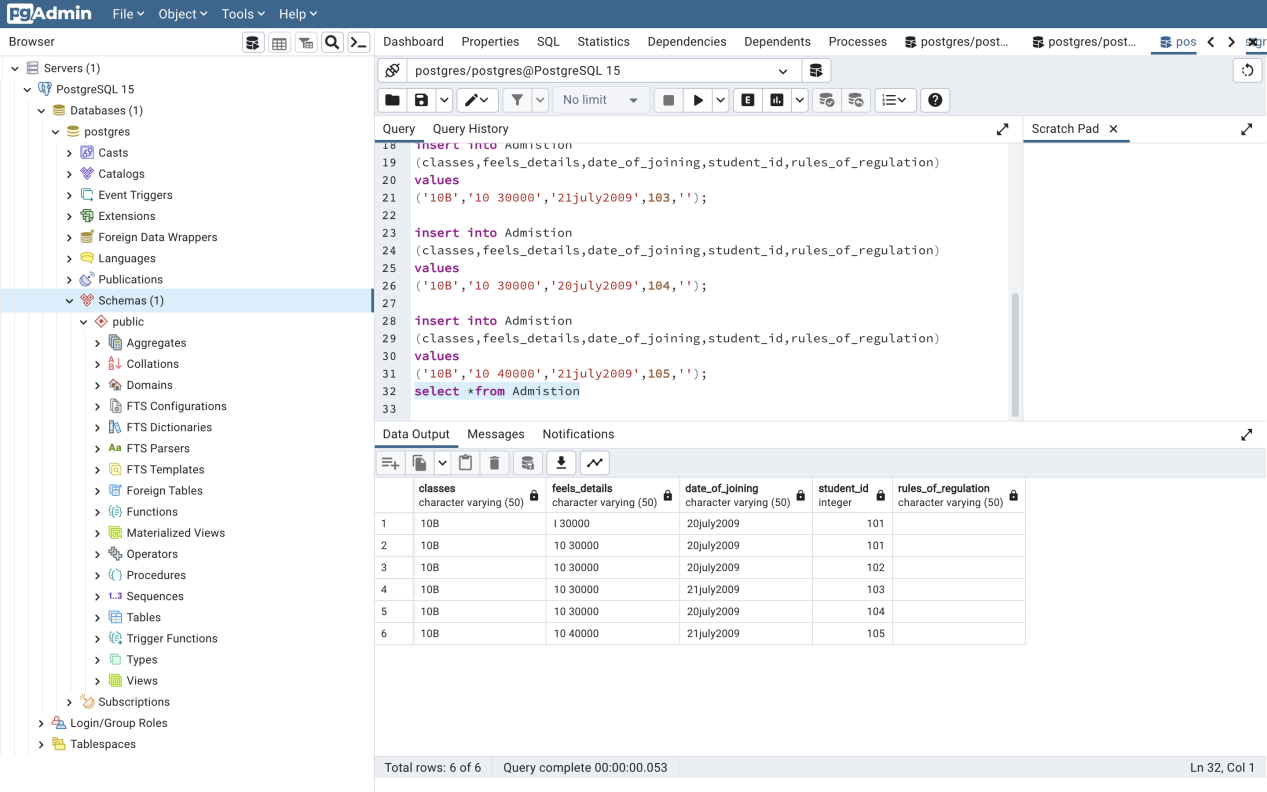
insert into Admistion

(classes,feels\_details,date\_of\_joining,student\_id,rules\_of\_regulation)

values

('10B','10 40000','21july2009',105,'');

select \*from Admistion



create table parent

(parent\_id serial

parent\_email varchar(50),

parent\_father varchar(50),

parent\_mather varchar(40),

occupation varchar(40),

phone\_no serial,

annual\_income int);

insert into parent

(parent\_id,parent\_email,parent\_father,parent\_mather,occuption,phone\_no,annual\_income)

values

[(101,'reemasatha@gmail.com','Sathabahadur','saraswathy','manager',9444991693,400000);](mailto:(101,'reemasatha@gmail.com','Sathabahadur','saraswathy','manager',9444991693,400000);)

create table Exam1

(exam\_id int,

exam\_name varchar(40),

subject varchar(70),

date\_of\_exam varchar(50));

insert into Exam1

(exam\_id,exam\_name,subject,date\_of\_exam)

values

(1220,'Quartely','Tamil','20sep2023');

insert into Exam1

(exam\_id,exam\_name,subject,date\_of\_exam)

values

(1221,'Quartely','English','20sep2023');

insert into Exam1

(exam\_id,exam\_name,subject,date\_of\_exam)

values

(1222,'Quartely','Maths','20sep2023');

insert into Exam1

(exam\_id,exam\_name,subject,date\_of\_exam)

values

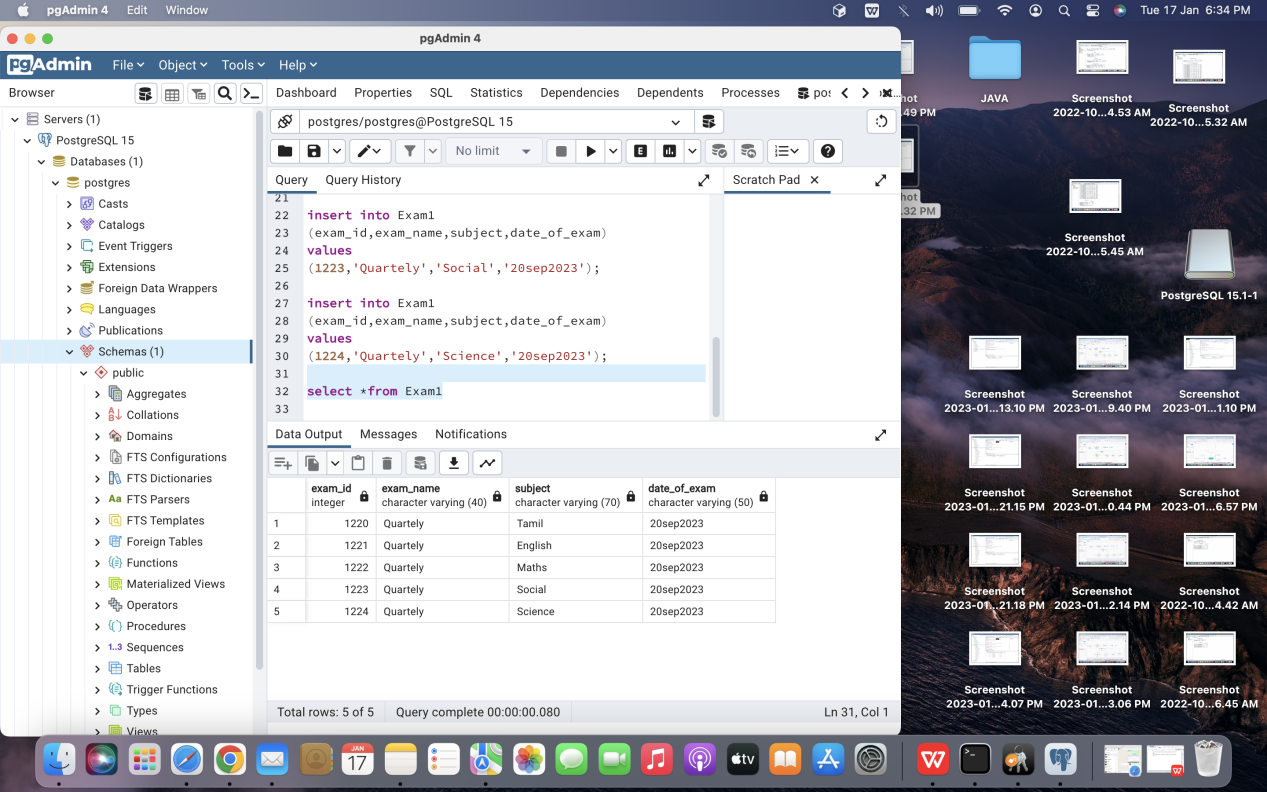
(1223,'Quartely','Social','20sep2023');

insert into Exam1

(exam\_id,exam\_name,subject,date\_of\_exam)

values

(1224,'Quartely','Science','20sep2023');

select \*from Exam1

create table class\_table

(class\_id varchar(50),

student\_id serial,

teacher\_id serial);

insert into class\_table

(class\_id,student\_id,teacher\_id)

values

('10A',5567,099);

insert into class\_table

(class\_id,student\_id,teacher\_id)

values

('10B',5568,081);

insert into class\_table

(class\_id,student\_id,teacher\_id)

values

('9A',5544,098);

insert into class\_table

(class\_id,student\_id,teacher\_id)

values

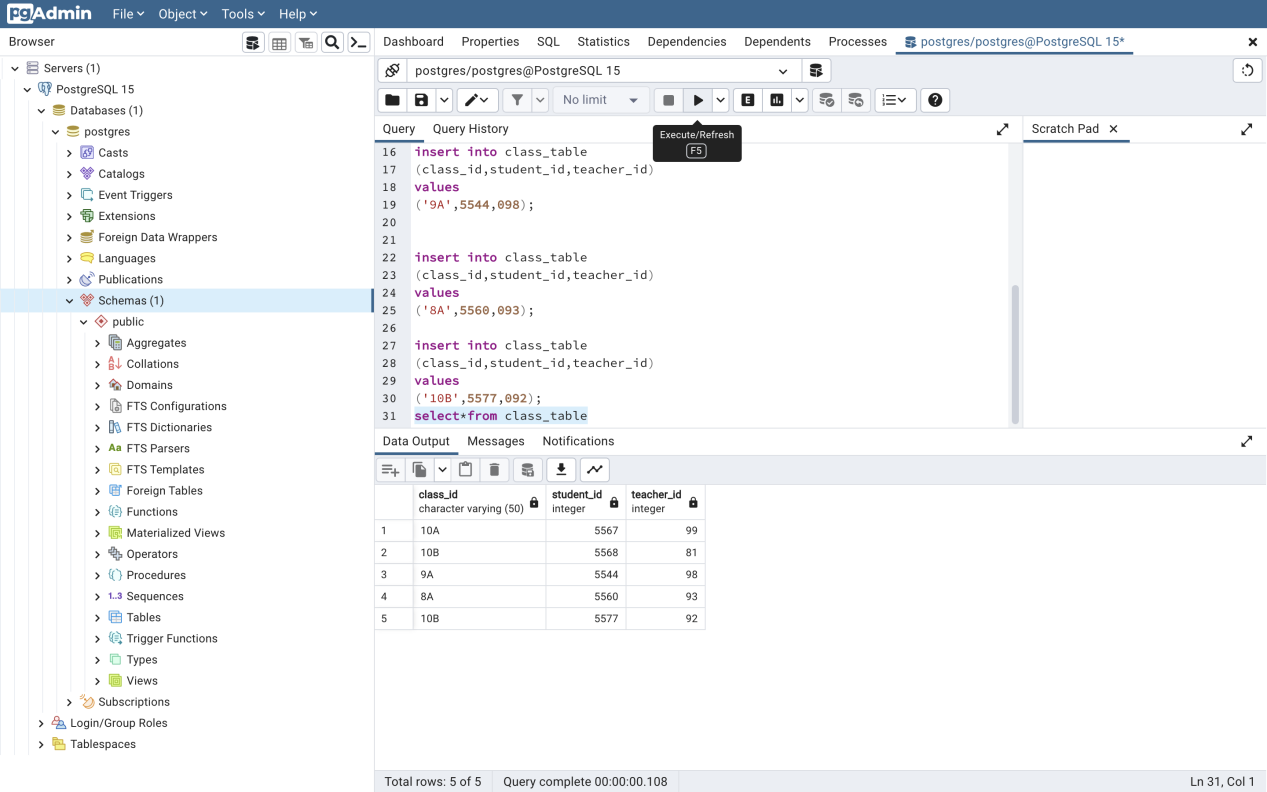
('8A',5560,093);

insert into class\_table

(class\_id,student\_id,teacher\_id)

values

('10B',5577,092);

select\*from class\_table

create table time\_table3

(classes varchar(30),

time\_table varchar(30));

insert into time\_table3

(classes,time\_table)

values

('11 A','I period biology');

insert into time\_table3

(classes,time\_table)

values

('11 A','II period English');

insert into time\_table3

(classes,time\_table)

values

('11 A','III period German');

insert into time\_table3

(classes,time\_table)

values

('11 A','IV period Maths');

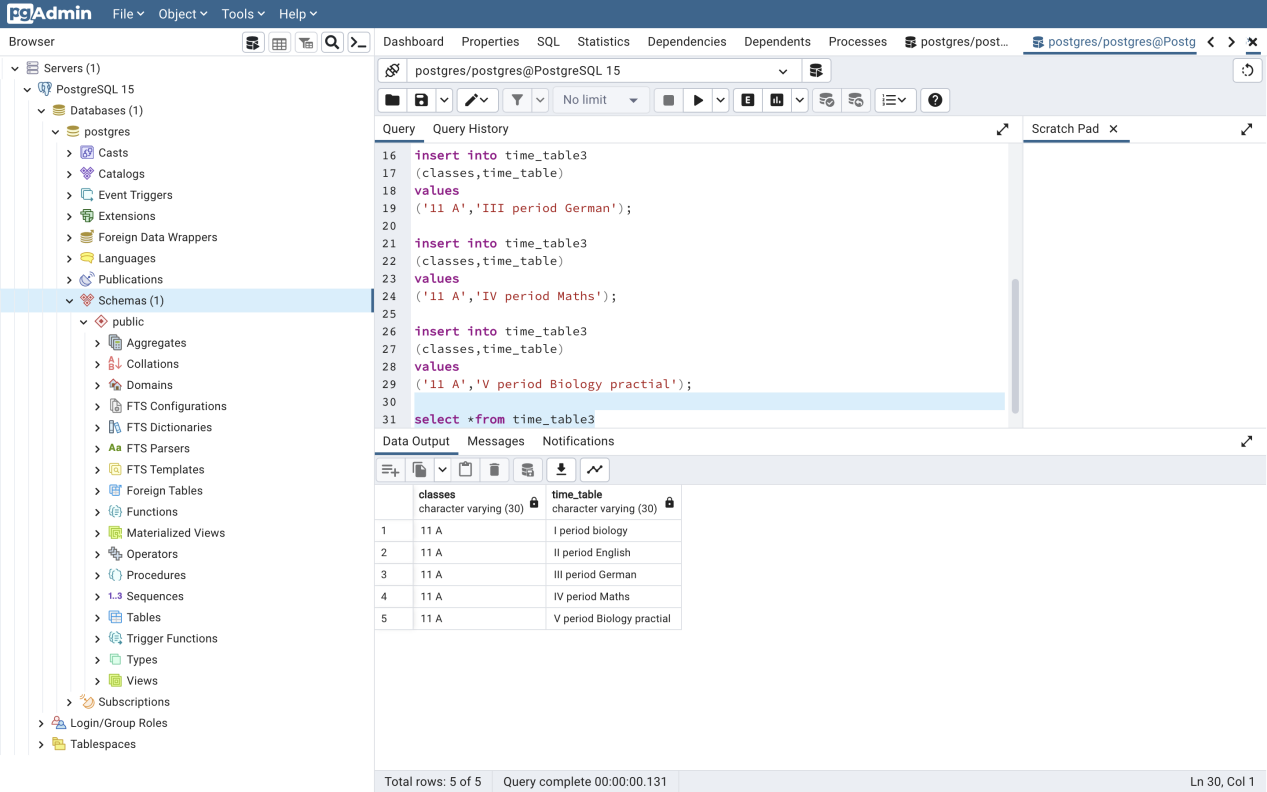
insert into time\_table3

(classes,time\_table)

values

('11 A','V period Biology practial');

select \*from time\_table3



insert into student

(stu\_id,stu\_name,stu\_email,stu\_phone,stu\_gender,stu\_address,stu\_dob,stu\_class,stu\_team)

values

(5567,'Reema','reema@gmail.com','9677243794','female','98fcanal bank road chennai20','27june2003','10A','ruby');

insert into student

(stu\_id,stu\_name,stu\_email,stu\_phone,stu\_gender,stu\_address,stu\_dob,stu\_class,stu\_team)

values

(5568,'Abinaya','abi@gmail.com','967725678','female','22f rayapuram chennai-20','20Auguest2003','10A','emarald');

insert into student

(stu\_id,stu\_name,stu\_email,stu\_phone,stu\_gender,stu\_address,stu\_dob,stu\_class,stu\_team)

values

(5569,'Sanjay','sanjay@gmail.com','9445280528','female','perumal kovil street chennai-25','11june2003','10A','ruby');

insert into student

(stu\_id,stu\_name,stu\_email,stu\_phone,stu\_gender,stu\_address,stu\_dob,stu\_class,stu\_team)

values

(5570,'Thendral','Thendral@gmail.com','9677234007','female','38 gandhi nagar 3 main street chennai-20','21Auguest2003','10A','pearl');

insert into student

(stu\_id,stu\_name,stu\_email,stu\_phone,stu\_gender,stu\_address,stu\_dob,stu\_class,stu\_team)

values

(5571,'kavin','kavin@gmail.com','9176283254','female','98fcanal bank road second street chennai-21','13Nov2003','10A','supphire');

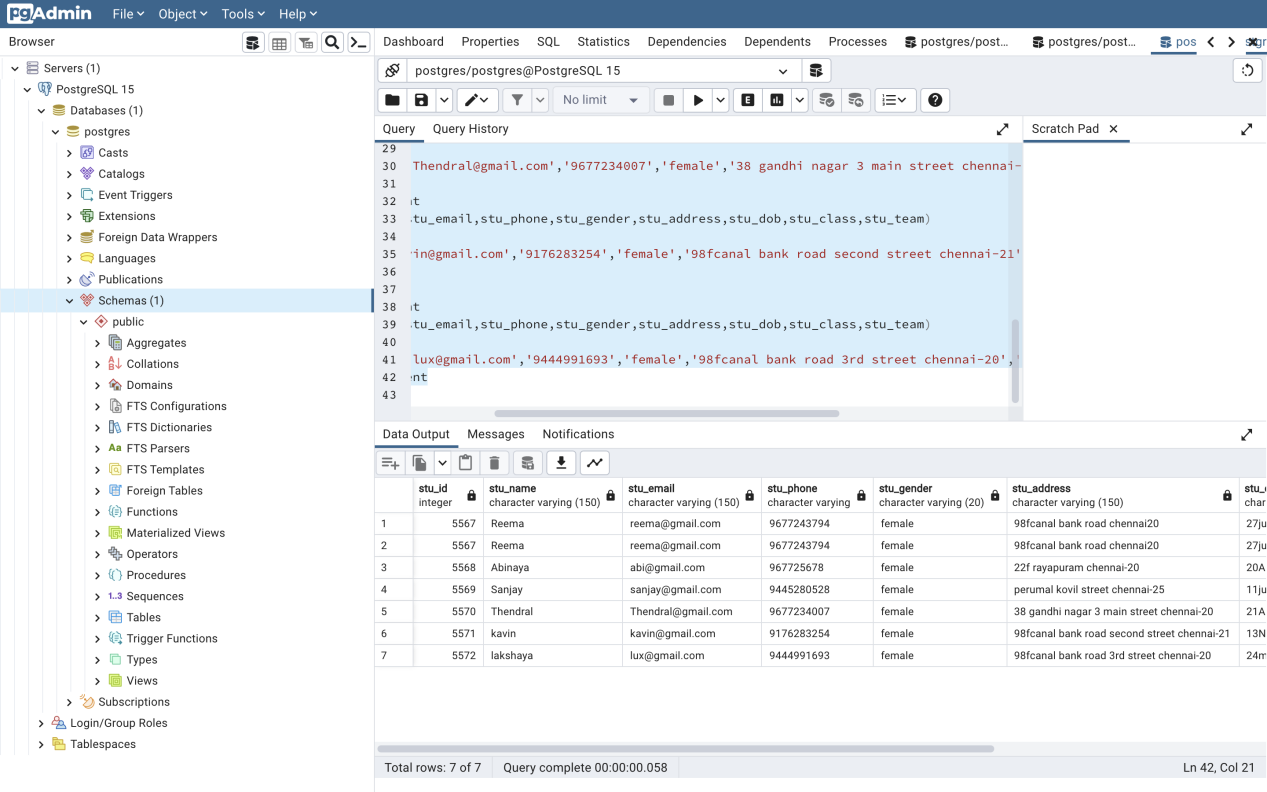
insert into student

(stu\_id,stu\_name,stu\_email,stu\_phone,stu\_gender,stu\_address,stu\_dob,stu\_class,stu\_team)

values

(5572,'lakshaya','lux@gmail.com','9444991693','female','98fcanal bank road 3rd street chennai-20','24march2003','10A','Sapphihe');

select \*from student



create table Teacher

(tr\_id serial primary key,

tr\_name varchar(150),

tr\_email varchar(150),

tr\_phone varchar,

tr\_gender varchar(20),

tr\_address varchar(150),

tr\_dob varchar(150),

tr\_class varchar(50),

tr\_team varchar(150));

insert into Teacher

(tr\_id,tr\_name,tr\_email,tr\_phone,tr\_gender,tr\_address,tr\_dob,tr\_class,tr\_team)

values

(555,'Vijiyalaxmi','viji@gmail.com','9677243794','female','98fcanal bank road chennai20','27june2003','10A','ruby');

insert into Teacher

(tr\_id,tr\_name,tr\_email,tr\_phone,tr\_gender,tr\_address,tr\_dob,tr\_class,tr\_team)

values

(556,'Abinaya','abi@gmail.com','967725678','female','22f rayapuram chennai-20','20Auguest2003','10A','emarald');

insert into Teacher

(tr\_id,tr\_name,tr\_email,tr\_phone,tr\_gender,tr\_address,tr\_dob,tr\_class,tr\_team)

values

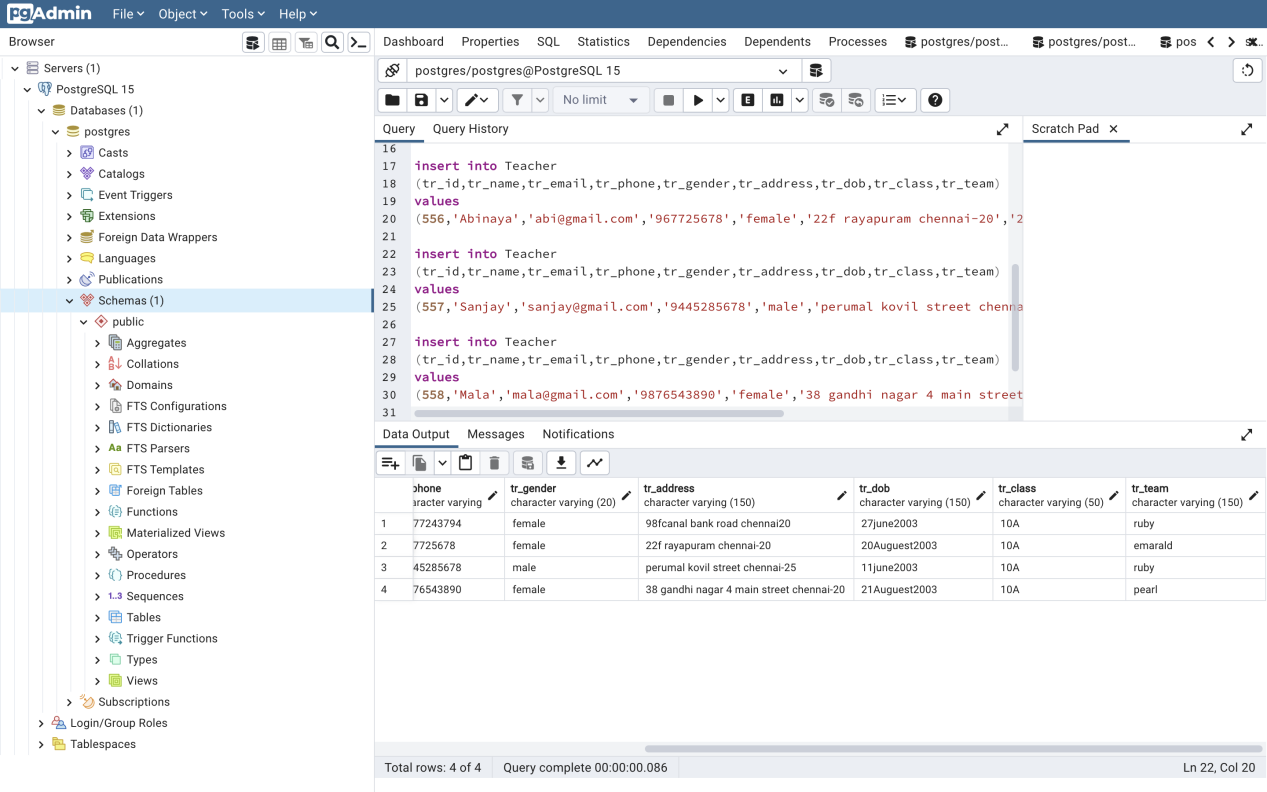
(557,'Sanjay','sanjay@gmail.com','9445285678','male','perumal kovil street chennai-25','11june2003','10A','ruby');

insert into Teacher

(tr\_id,tr\_name,tr\_email,tr\_phone,tr\_gender,tr\_address,tr\_dob,tr\_class,tr\_team)

values

(558,'Mala','mala@gmail.com','9876543890','female','38 gandhi nagar 4 main street chennai-20','21Auguest2003','10A','pearl');

select \*from Teacher

create table parent

(parent\_id serial,

parent\_email varchar(50),

parent\_father varchar(50),

parent\_mather varchar(40),

occupation varchar(40),

phone\_no bigint,

annual\_income int);

insert into parent

(parent\_id,parent\_email,parent\_father,parent\_mather,occupation,phone\_no,annual\_income)

values

(5567,'satha@gmail.com','Sathabahadur','saraswathy','manager',9444991693,400000);

insert into parent

(parent\_id,parent\_email,parent\_father,parent\_mather,occupation,phone\_no,annual\_income)

values

(5568,'vasudevan@gmail.com','Vasudeyvan','Nisha','HR',9444997883,500000);

insert into parent

(parent\_id,parent\_email,parent\_father,parent\_mather,occupation,phone\_no,annual\_income)

values

(5569,'MAGESH@gamil.com','magesh','sasikala','Owner',9445280528,400000);

insert into parent

(parent\_id,parent\_email,parent\_father,parent\_mather,occupation,phone\_no,annual\_income)

values

(5570,'Rangaraju@gmail.com','Rangarajan','Uma','Developer',9446789693,10000000);

insert into parent

(parent\_id,parent\_email,parent\_father,parent\_mather,occupation,phone\_no,annual\_income)

values

(5571,'panner@gmail.com','Panner selvan','santhi','enginer',9677234007,600000);

select \* from parent;

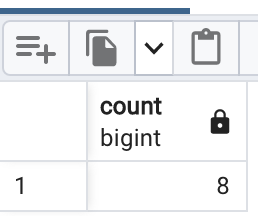
[GROUP BY AND ORDER BY (QUERY)]

1. Display Count of Teacher based on class or tr\_id

QUERY:

select count(tr\_id) from Teacher GROUP BY tr\_class;

**OUTPUT:**

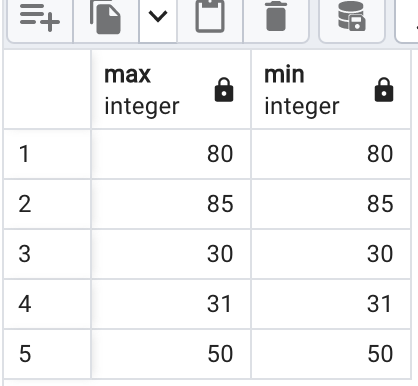
****

2. Display the mininum mark and maximum mark of students

QUERY:

select max(mark),min(mark) from Result GROUP BY student\_id;

**OUTPUT:**

****

[SINGLE ROW FUNCTION]

1. count the length of schoolname characters

QUERY:

select length(school\_name) from schoolmanagement;

**OUTPUT:**

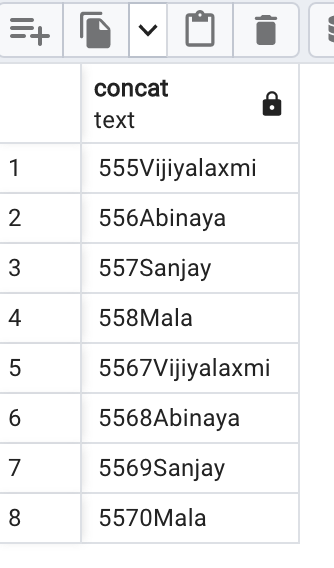
****

2.Display number of absent of number of parents together(cancat)

QUERY:

select concat(tr\_id,tr\_name)from Teacher;

**OUTPUT:**

****

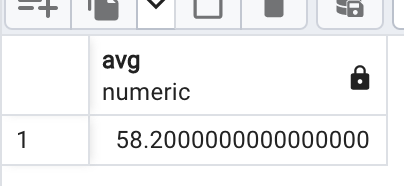
.AGGREGATE FUNCTION

1.Find the average mark of all student

QUERY:

select avg(mark) from Result;

**OUTPUT:**

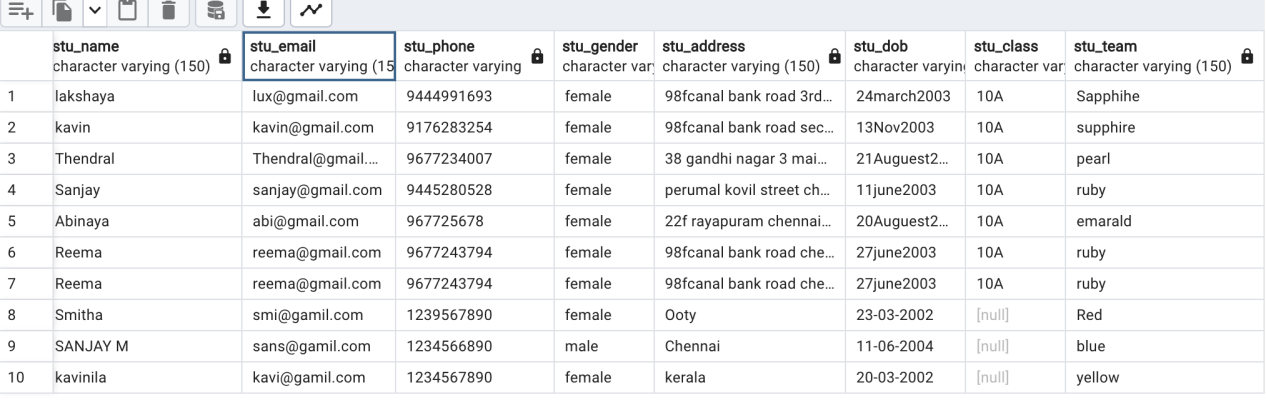
****

2.Display student name in descending order.

QUERY:

select \* from student order by stu\_id desc;

**OUTPUT:**

****

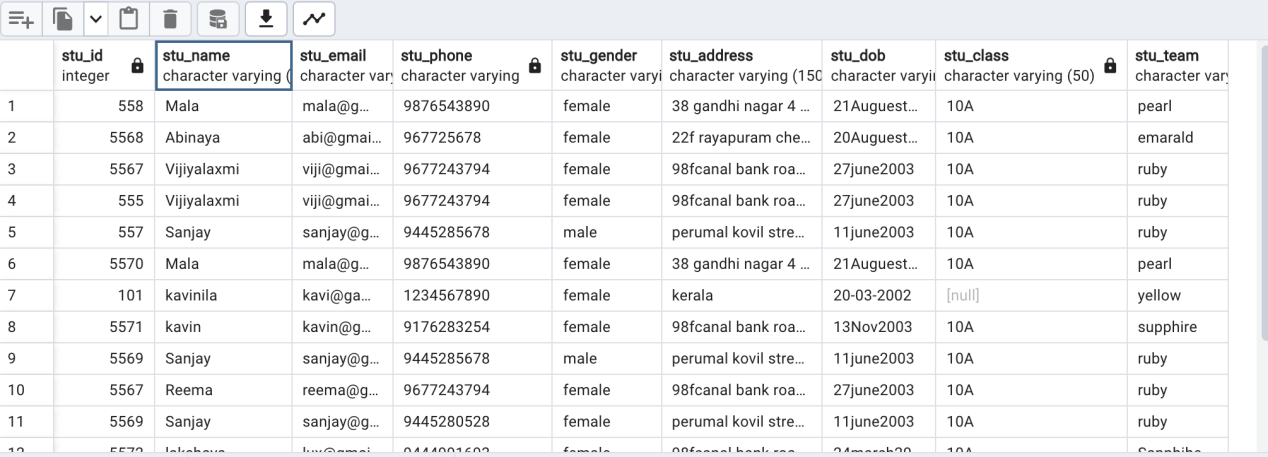
SET OPERATION

1.Display the all students and teacher in the school.

QUERY:

select \*from student UNION select \* from Teacher;

**OUTPUT:**

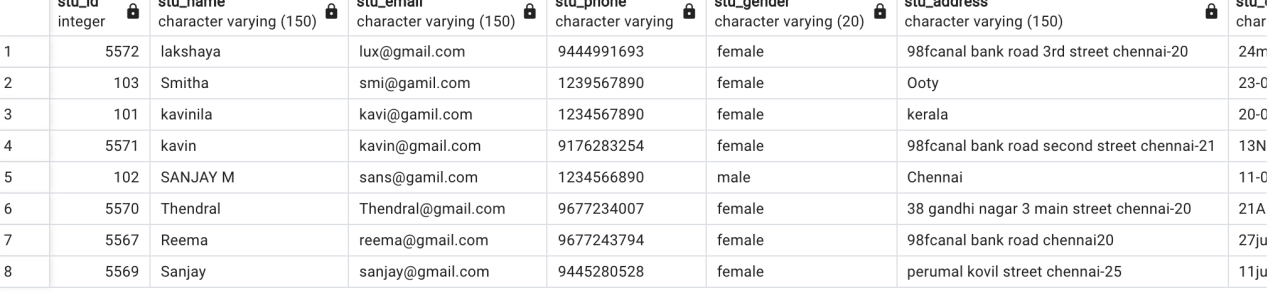
****

2.Display the list of student who where working as or teacher not as a student

QUERY:

select\* from student except select\*from Teacher;

**OUTPIUT:**

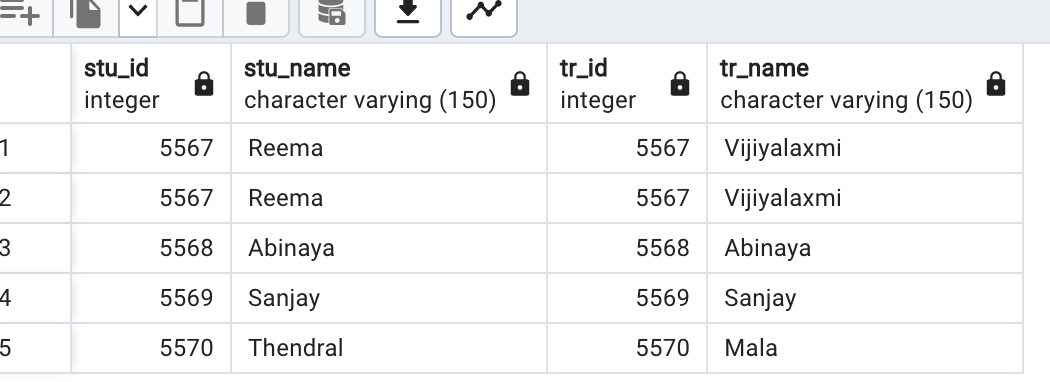


[JOIN]

1.Display all the student\_id and the teacher id

QUERY:

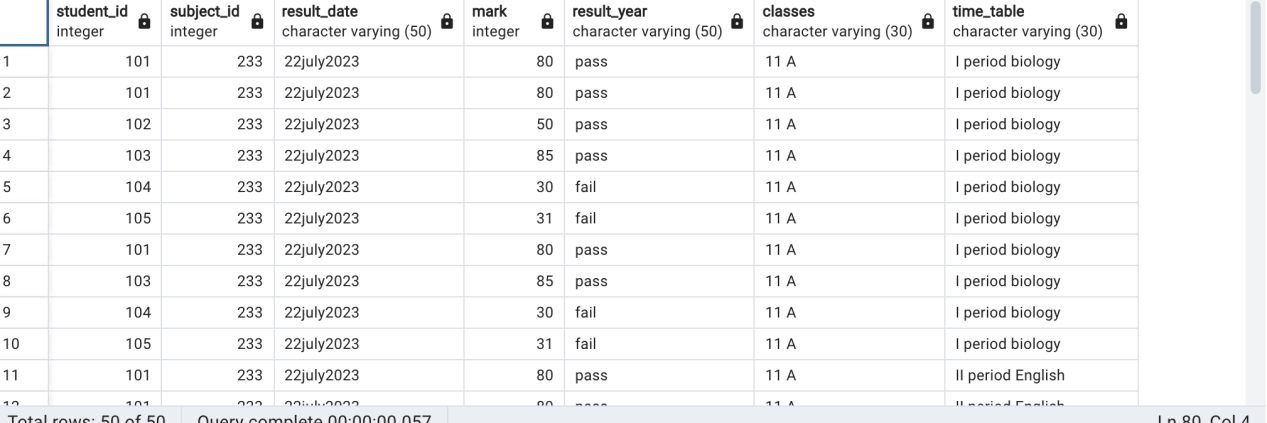
select stu\_id,stu\_name,tr\_id,tr\_name from Teacher join student on stu\_id=tr\_id

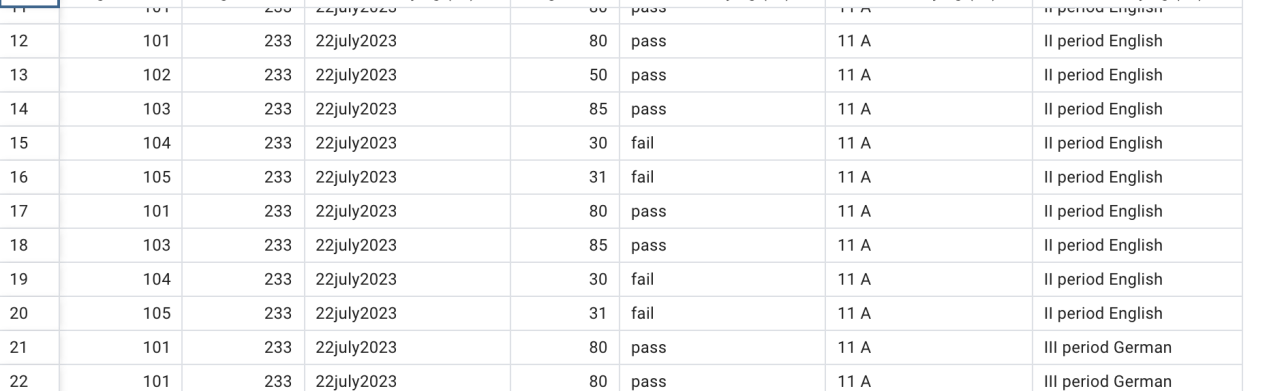
**OUTPUT:**

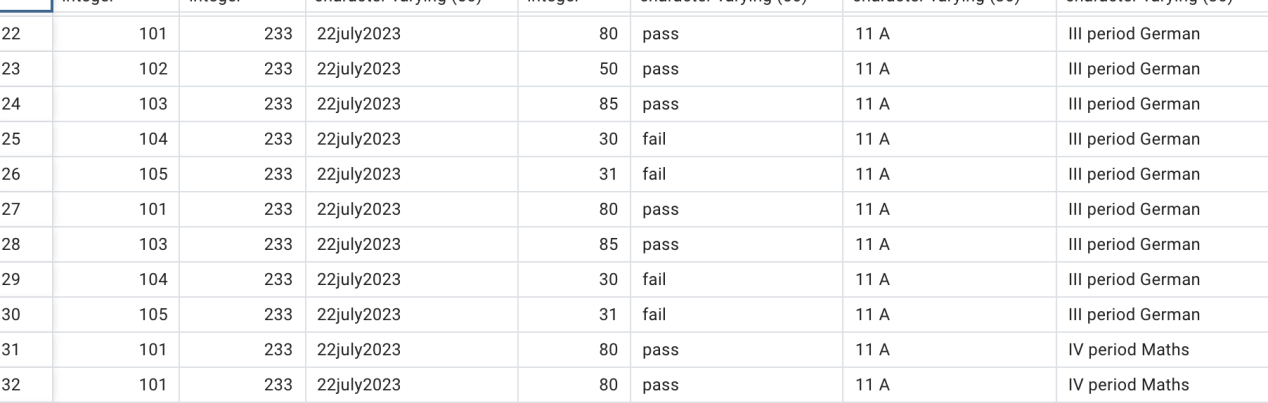
2.Display the records from both the table

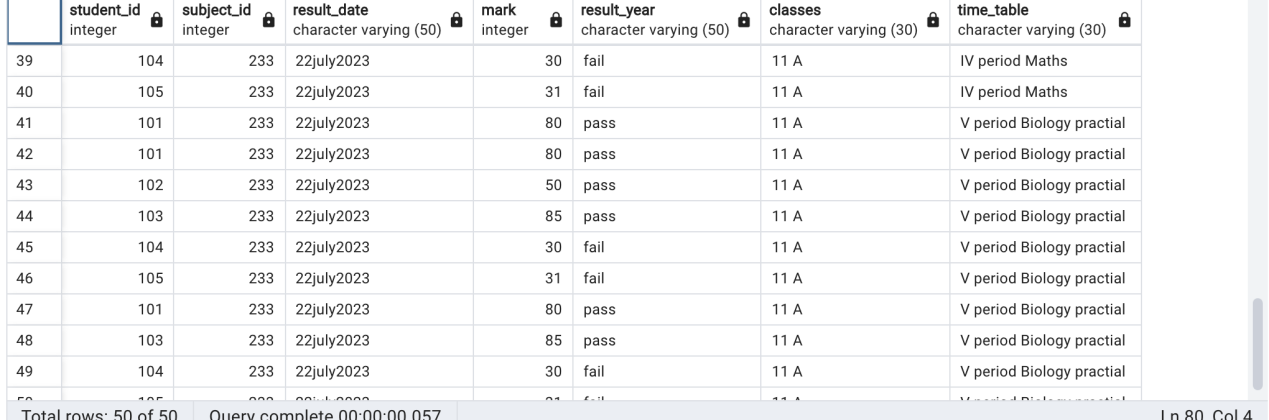
QUERY:

select \* from Result cross join Timetable;







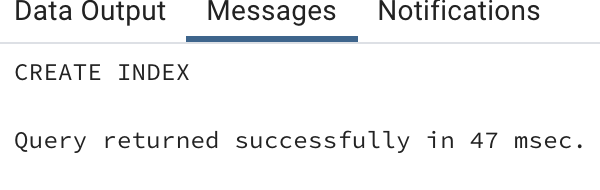


[VIEW,INDEX,SEQUENCE]

1.create a index for the field phone number

QUERY:

create index stu\_phone\_Index on student(stu\_phone);



VIEW

create a view called parent\_job with column (parent\_id parent name,parent email,parent income)and set of data where parent job 'manager' from the table.

create view parent\_job as

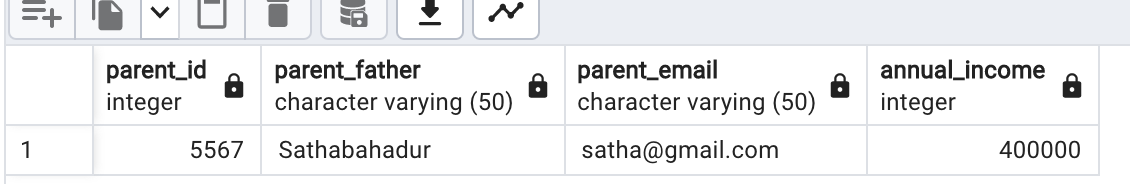
select parent\_id,parent\_father,parent\_email,annual\_income from parent

where occupation='manager';

select all the fields of the view

select \* from parent\_job;

**OUTPUT:**



[SUBQUERIES]

1.Display the student and teacher id if both same.

QUERY:

select stu\_name,stu\_id from student where stu\_id=(select tr\_id from Teacher where tr\_id=5567);

**OUTPUT:**

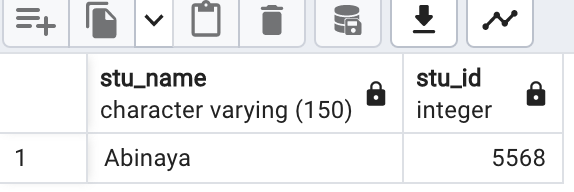


2.Fetch the details of parent using subquery

QUERY:

select stu\_name,stu\_id from student where stu\_id=(select parent\_id from parent where parent\_id=5568);

**OUTPUT:**

****

FUNCTION:

create or replace function myfun(x integer)

returns text as $$

declare

msg text;

begin

case

when x in(student)then

msg:='the table'

when x in(" ") then

msg:='the empty table';

create table Teacher

(tr\_id serial primary key,

tr\_name varchar(150),

tr\_email varchar(150),

tr\_phone varchar,

tr\_gender varchar(20),

tr\_address varchar(150),

tr\_dob varchar(150),

tr\_class varchar(50),

tr\_team varchar(150));

insert into Teacher

(tr\_id,tr\_name,tr\_email,tr\_phone,tr\_gender,tr\_address,tr\_dob,tr\_class,tr\_team)

values

(5567,'Vijiyalaxmi','viji@gmail.com','9677243794','female','98fcanal bank road chennai20','27june2003','10A','ruby');

insert into Teacher

(tr\_id,tr\_name,tr\_email,tr\_phone,tr\_gender,tr\_address,tr\_dob,tr\_class,tr\_team)

values

(5568,'Abinaya','abi@gmail.com','967725678','female','22f rayapuram chennai-20','20Auguest2003','10A','emarald');

insert into Teacher

(tr\_id,tr\_name,tr\_email,tr\_phone,tr\_gender,tr\_address,tr\_dob,tr\_class,tr\_team)

values

(5569,'Sanjay','sanjay@gmail.com','9445285678','male','perumal kovil street chennai-25','11june2003','10A','ruby');

insert into Teacher

(tr\_id,tr\_name,tr\_email,tr\_phone,tr\_gender,tr\_address,tr\_dob,tr\_class,tr\_team)

values

(5570,'Mala','mala@gmail.com','9876543890','female','38 gandhi nagar 4 main street chennai-20','21Auguest2003','10A','pearl');

select \*from Teacher

CURSOR

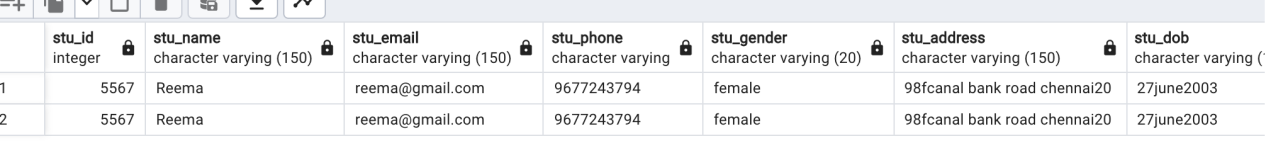
begin ;

declare

mycursor cursor for select\* from student;

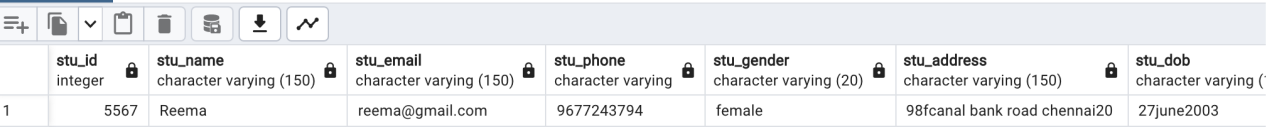
1. Display first 2 records from student table

fetch 2 from mycursor;



2.display the before record.

fetch prior from mycursor;



commit

SEQUENCE

create sequence result1

start 10

increment 20

minvalue 10

owned by Result.student\_id;

insert into Result

(student\_id,subject\_id,result\_date,mark,result\_year)

values

(101,0233,'22july2023',80,'pass');

insert into Result

(student\_id,subject\_id,result\_date,mark,result\_year)

values

(102,0233,'22july2023',50,'pass');

insert into Result

(student\_id,subject\_id,result\_date,mark,result\_year)

values

(103,0233,'22july2023',85,'pass');

insert into Result

(student\_id,subject\_id,result\_date,mark,result\_year)

values

(104,0233,'22july2023',30,'fail');

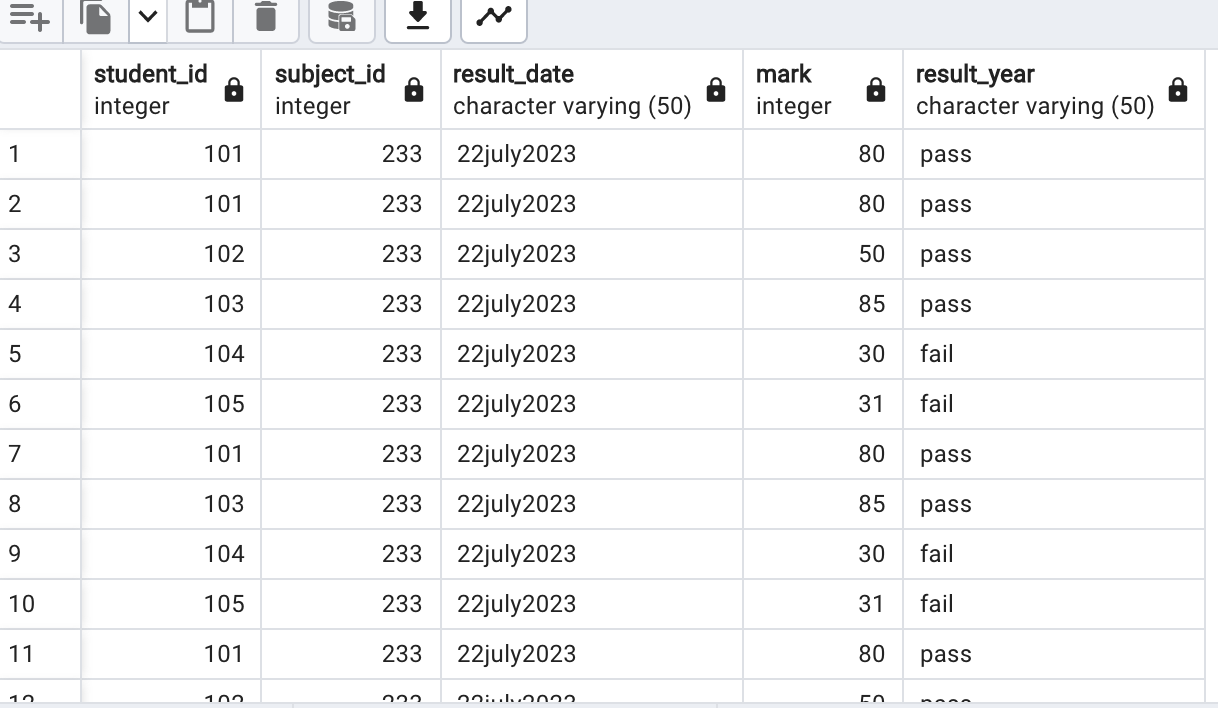
insert into Result

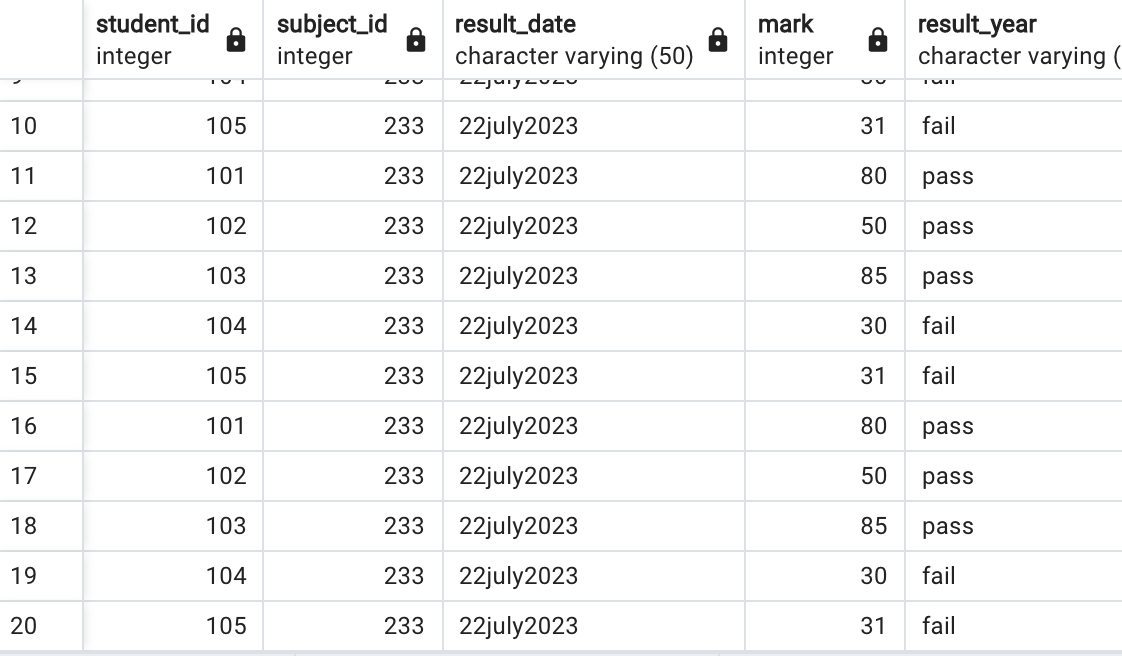
(student\_id,subject\_id,result\_date,mark,result\_year)

values

(105,0233,'22july2023',31,'fail');

select \* from Result;





PROCEDURE

create table mark\_stu1

(id int generated by default as identity ,

name varchar(30),

mark int,

mark1 int,

mark2 int,

mark3 int,

mark4 int,

total dec(15,2) not null);

insert into mark\_stu1

(id,name,mark,mark1,mark2,mark3,mark4,total)

values

(5567,'Reema',80,30,40,50,60,260);

insert into mark\_stu1

(id,name,mark,mark1,mark2,mark3,mark4,total)

values

(5568,'Abinaya',60,80,40,50,60,290);

insert into mark\_stu1

(id,name,mark,mark1,mark2,mark3,mark4,total)

values

(5569,'Sanjay',90,50,98,57,70,365);

insert into mark\_stu1

(id,name,mark,mark1,mark2,mark3,mark4,total)

values

(5570,'Thendral',85,40,70,90,50,335);

insert into mark\_stu1

(id,name,mark,mark1,mark2,mark3,mark4,total)

values

(5571,'Kavin',80,30,50,50,70,280);

select \* from mark\_stu1;

create or replace procedure transfer(sender int,receiver int,amount dec)

language plpgsql

as $$

begin

update accounts

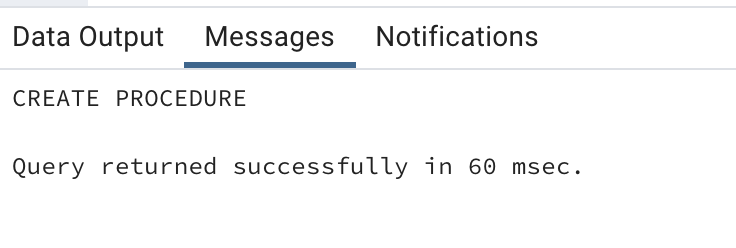
set balance=balance-amount where id =sender;

update accounts

set balance=balance+amount where id =receiver;

end;

$$



select \* from mark\_stu1;

call transfer(1,2,20);

FUNCTION

create table Result

(student\_id serial,

subject\_id serial,

result\_date varchar(50),

mark int,

result\_year varchar(50));

insert into Result

(student\_id,subject\_id,result\_date,mark,result\_year)

values

(101,0233,'22july2023',80,'pass');

insert into Result

(student\_id,subject\_id,result\_date,mark,result\_year)

values

(102,0233,'22july2023',50,'pass');

insert into Result

(student\_id,subject\_id,result\_date,mark,result\_year)

values

(103,0233,'22july2023',85,'pass');

insert into Result

(student\_id,subject\_id,result\_date,mark,result\_year)

values

(104,0233,'22july2023',30,'fail');

insert into Result

(student\_id,subject\_id,result\_date,mark,result\_year)

values

(105,0233,'22july2023',31,'fail');

Select\*from Result

create or replace function

total()

Returns integer

as $$

declare

total integer;

begin

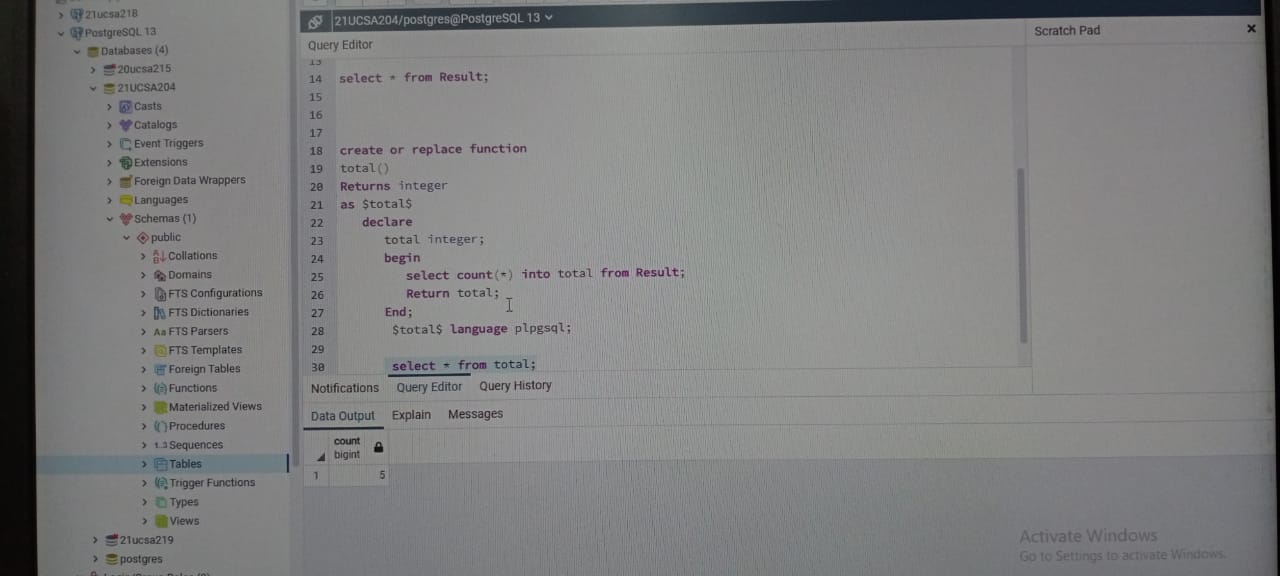
select count(\*) into total from Result;

Return total;

end;

$$ language 'plpgsql';

select \* from total;



create or replace function

max()

returns integer

as $max$

declare

max integer;

begin

select max(mark) into max from Result;

Return max;

end;

$max$ language 'plpgsql';

select \* from max;

TRIGGER

create or replace function comp\_trigger\_insert\_fun()

Returns trigger

as $$

Begin

insert into stu\_it

(stu\_id,Entry\_date)

values

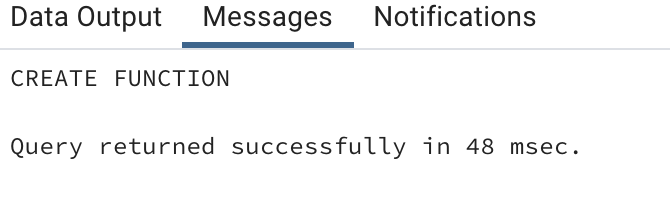
(new.stu\_id,current\_date);

Return new;create

end;

$$

language 'plpgsql'



create trigger comp\_trigger\_insert1

after insert

on Teacher

for each row

execute procedure comp\_trigger\_insert\_fun();

insert into Teacher

(tr\_gender)

values

('female');

insert into Teacher

(tr\_gender)

values

('male');

insert into Teacher

(tr\_gender)

values

('female');

select\* from Teacher;