# CREATE TABLE

create table gate (

gate\_id int,

address varchar,

primary key (gate\_id)

);

create table entry (

entry\_id int,

e\_time int,

e\_date date,

primary key (entry\_id)

);

create table parking (

park\_id int,

lot\_number int,

primary key (park\_id)

);

create table driver (

driver\_id int,

lname varchar,

fname varchar,

car\_number varchar,

entry\_id int,

park\_id int,

primary key (driver\_id),

foreign key (entry\_id) references entry(entry\_id),

foreign key (park\_id) references parking(park\_id)

);

create table employee (

emp\_id int,

lname varchar,

fname varchar,

salary decimal,

working\_hours int,

gate\_id int,

primary key (emp\_id),

foreign key (gate\_id) references gate(gate\_id)

);

create table problem (

problem\_id int,

description varchar,

primary key (problem\_id)

);

create table helping\_center(

h\_c\_id int,

address varchar,

emp\_id int,

problem\_id int,

driver\_id int,

primary key (problem\_id),

foreign key (emp\_id) references employee(emp\_id),

foreign key (problem\_id) references problem(problem\_id),

foreign key (driver\_id) references driver(driver\_id)

);

alter table entry

add column enter\_time time(0);

alter table entry

drop column e\_time;

alter table entry

add column exit\_time time(0);

create table paying\_system(

pay\_id int,

charge int,

min\_from int,

min\_to int,

primary key (pay\_id)

);

alter table employee

add column department varchar;

# INSERT INTO

insert into gate (gate\_id, address) values

(1, 'Block A'),

(2, 'Block B'),

(3, 'Block C'),

(4, 'Block D'),

(5, 'Block E');

insert into parking (park\_id, lot\_number) values

(1, 101),

(2, 102),

(3, 103),

(4, 104),

(5, 105),

(6, 106),

(7, 107),

(8, 108),

(9, 109),

(10, 110),

(11, 111),

(12, 112),

(13, 113),

(14, 114),

(15, 115);

insert into employee (emp\_id, salary, working\_hours, fname, lname, department) values

(101, 100000, 45, 'Cherrie', 'Stops', 'manager'),

(102, 120000, 50, 'Jerrold', 'Appleberry', 'manager'),

(103, 57000, 25, 'Eloy', 'Simoes', 'security'),

(104, 64000, 30, 'Rocco', 'Friar', 'assistant'),

(105, 98000, 41, 'Denis', 'Toye', 'manager'),

(106, 73000, 34, 'Chung', 'Bagnall', 'assistant'),

(107, 70000, 33, 'Cristin', 'Monsivais', 'security'),

(108, 95500, 40, 'Crista', 'Holdeman', 'manager'),

(109, 42000, 19, 'Brittney', 'Ferguson', 'assistant'),

(110, 53000, 23, 'Blanch', 'Baillargeon', 'security');

insert into helping\_center (h\_c\_id, address, emp\_id, problem\_id, driver\_id) values

(1, 'Block A', 101, 2, 5),

(2, 'Block B', 108, 3, 3),

(3, 'Block C', 105, 1, 2),

(4, 'BLock D', 108, 4, 1);

insert into problem (problem\_id, description) values

(1, 'Accident'),

(2, 'Technical issue'),

(3, 'Wrong receipt'),

(4, 'Suggestions');

insert into employee (gate\_id) values (1), (2), (1), (5), (3), (4), (2), (5), (3), (4);

insert into paying\_system (pay\_id, charge, min\_from, min\_to) values

(1, 0, 0, 15),

(2, 100, 16, 60),

(3, 200, 61, 120),

(4, 300, 121, 180),

(5, 400, 181, 240),

(6, 500, 241, 300);

insert into entry (entry\_id, e\_date, enter\_time, exit\_time) values

(1, '2019-12-1', '09:10:00', '10:00:00'),

(2, '2019-11-23', '15:03:00', '15:10:00'),

(3, '2019-9-19', '17:25:00', '19:30:00'),

(4, '2019-10-27', '13:59:00', '14:10:00'),

(5, '2019-10-28', '18:10:00', '19:00:00');

insert into driver (driver\_id, fname, lname, car\_number, entry\_id, park\_id) values

(1, 'Jami', 'Ray', 'Z180OPI', 2, 15),

(2, 'Earl', 'Dawe', 'A548ITR', 1, 10),

(3, 'Paris', 'Lombardi', 'Q745ASR', 5, 7),

(4, 'Joselyn', 'Beery', 'V648PSX', 4, 1),

(5, 'Devora', 'Gully', 'W700UYT', 3, 5);

ALTER TABLE driver

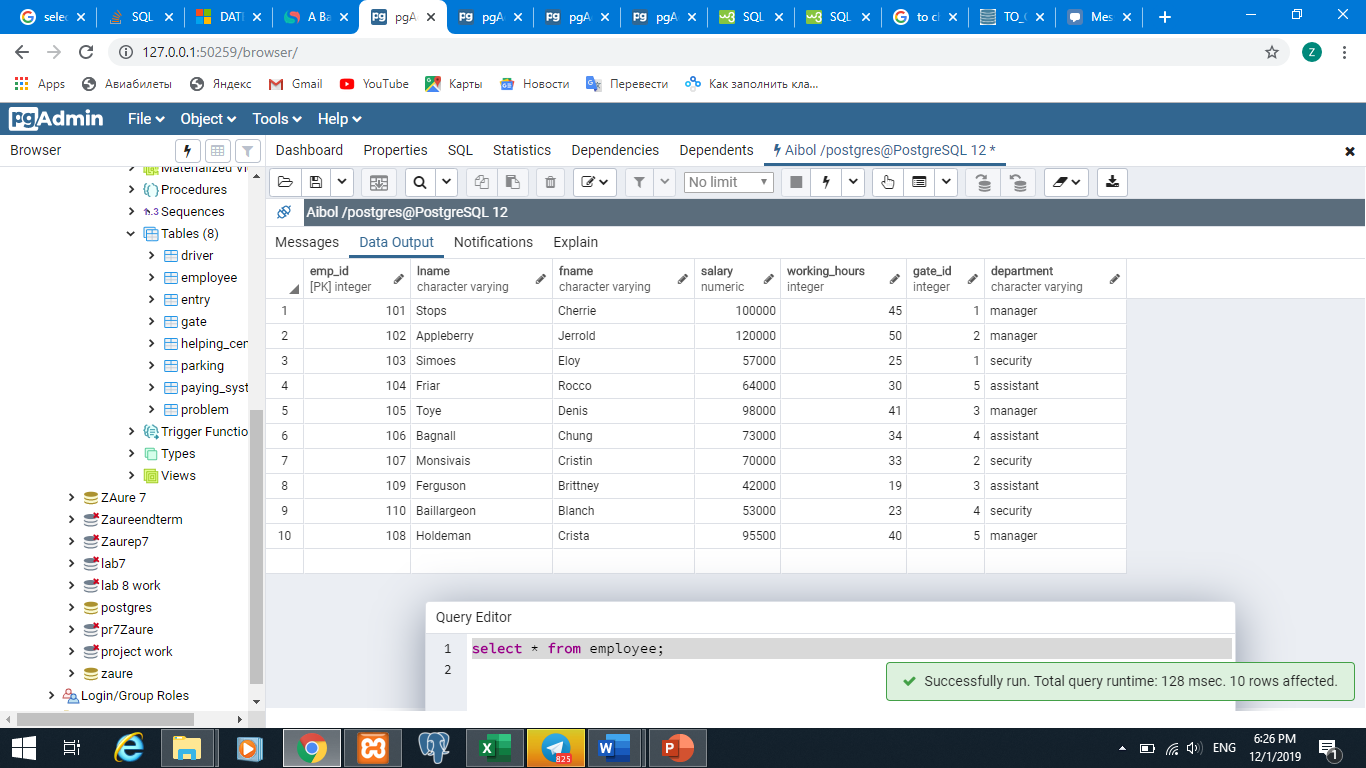
add column pay\_id int;

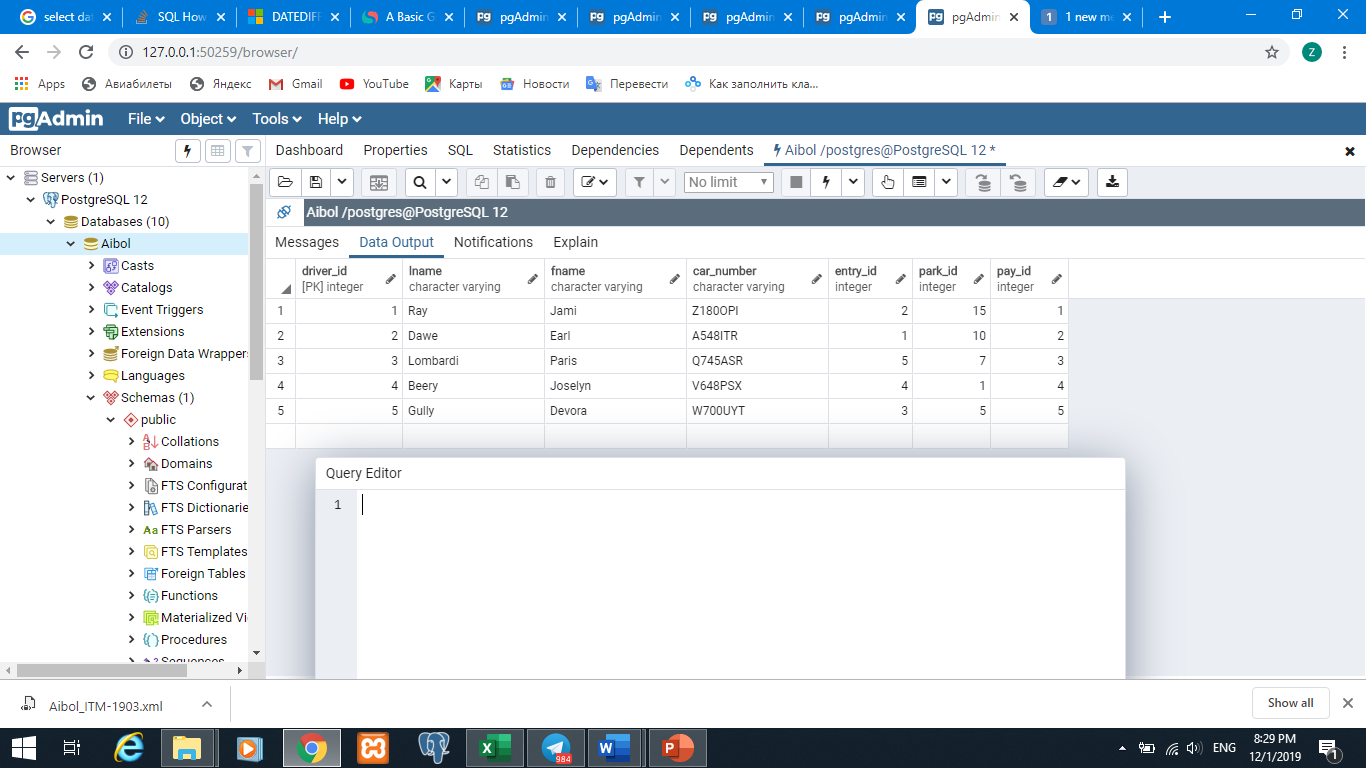
ALTER TABLE driver

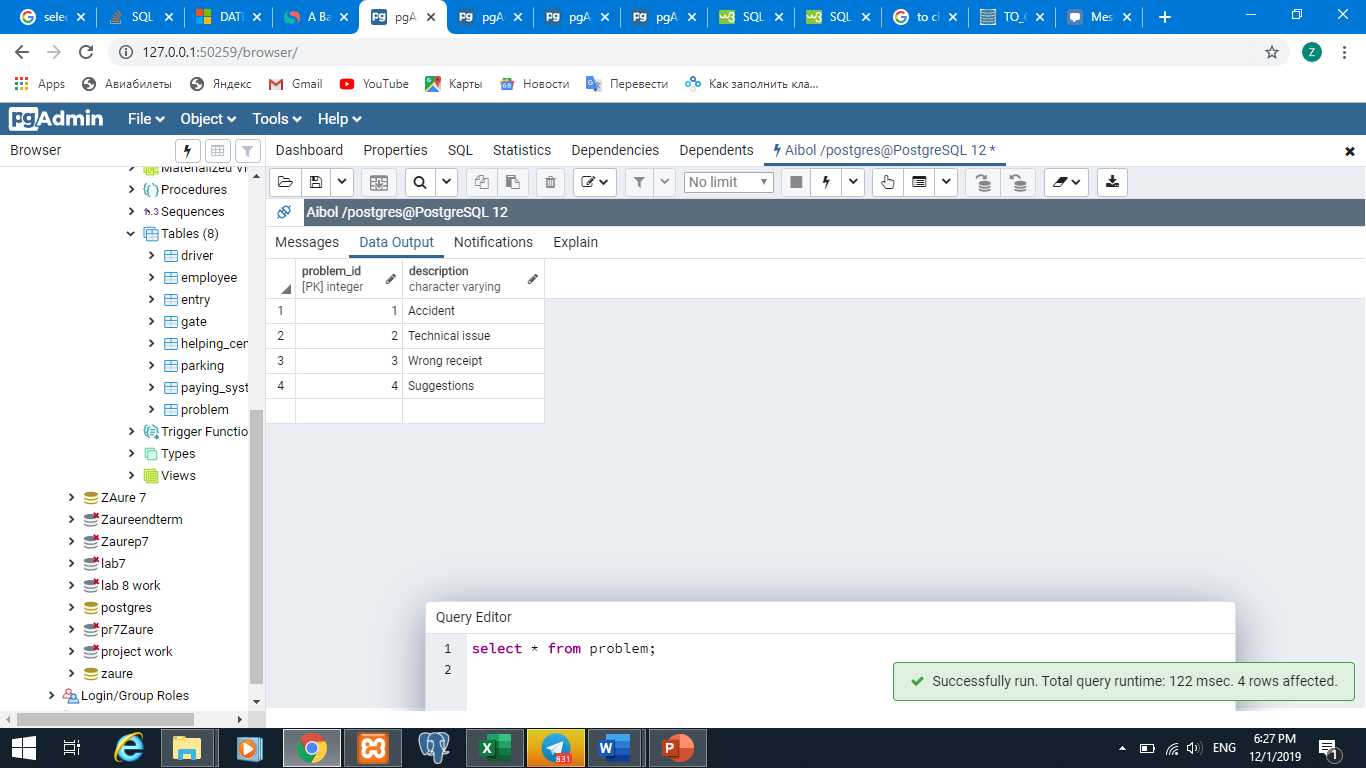
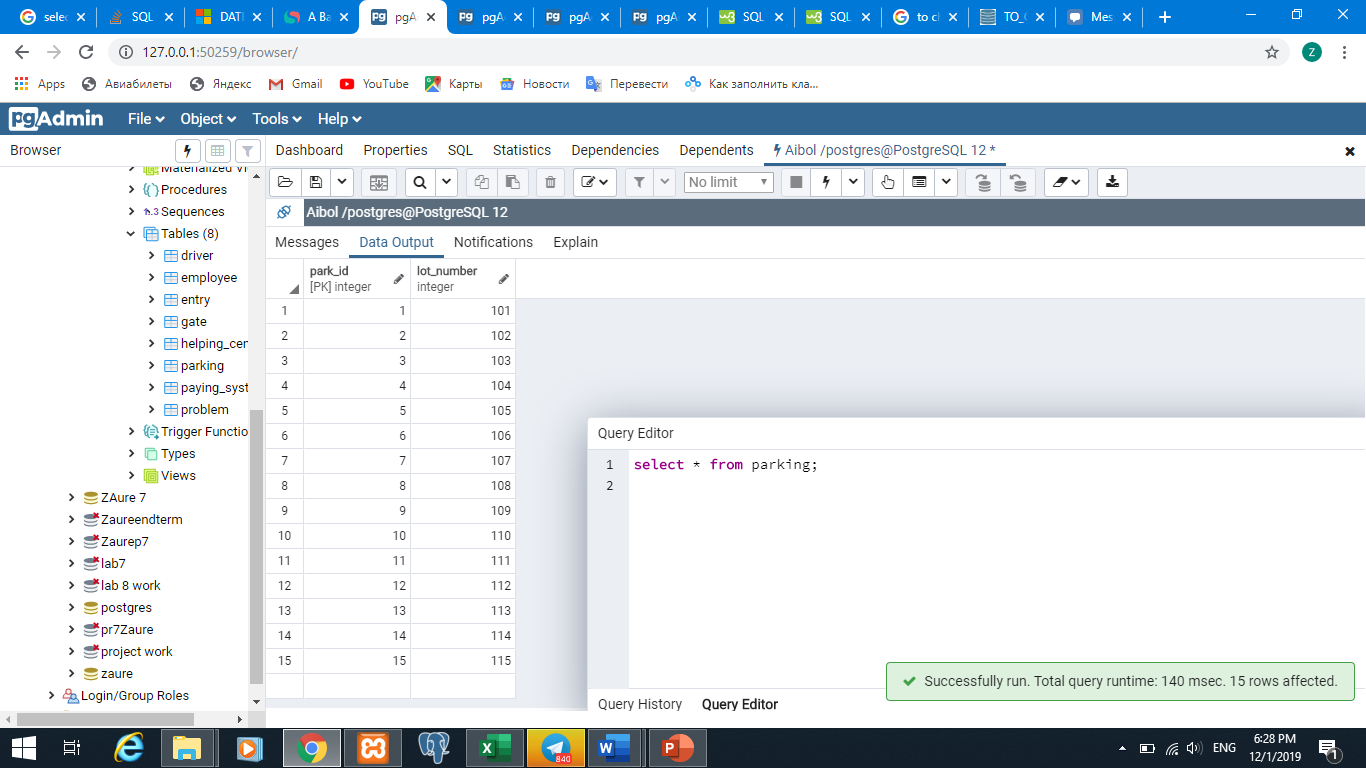
ADD CONSTRAINT driver\_fk

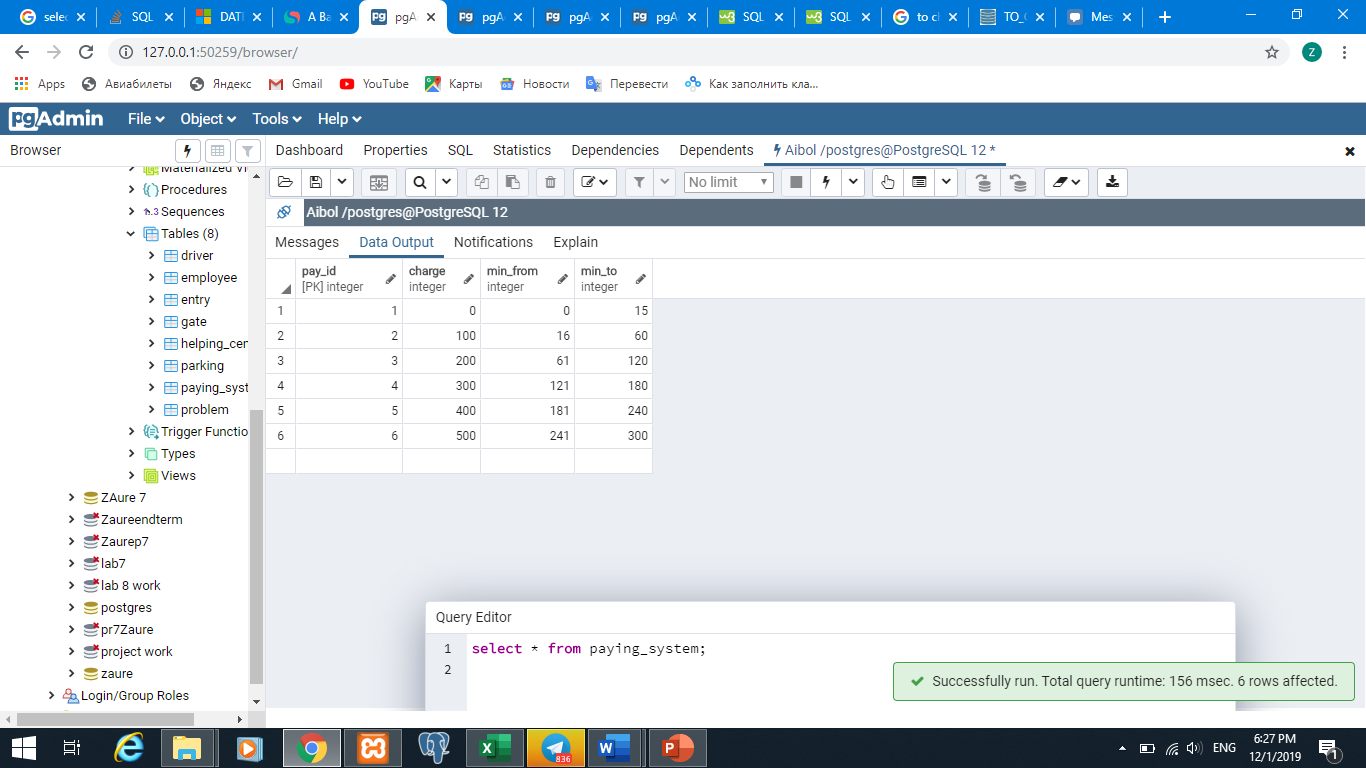
FOREIGN KEY (pay\_id)

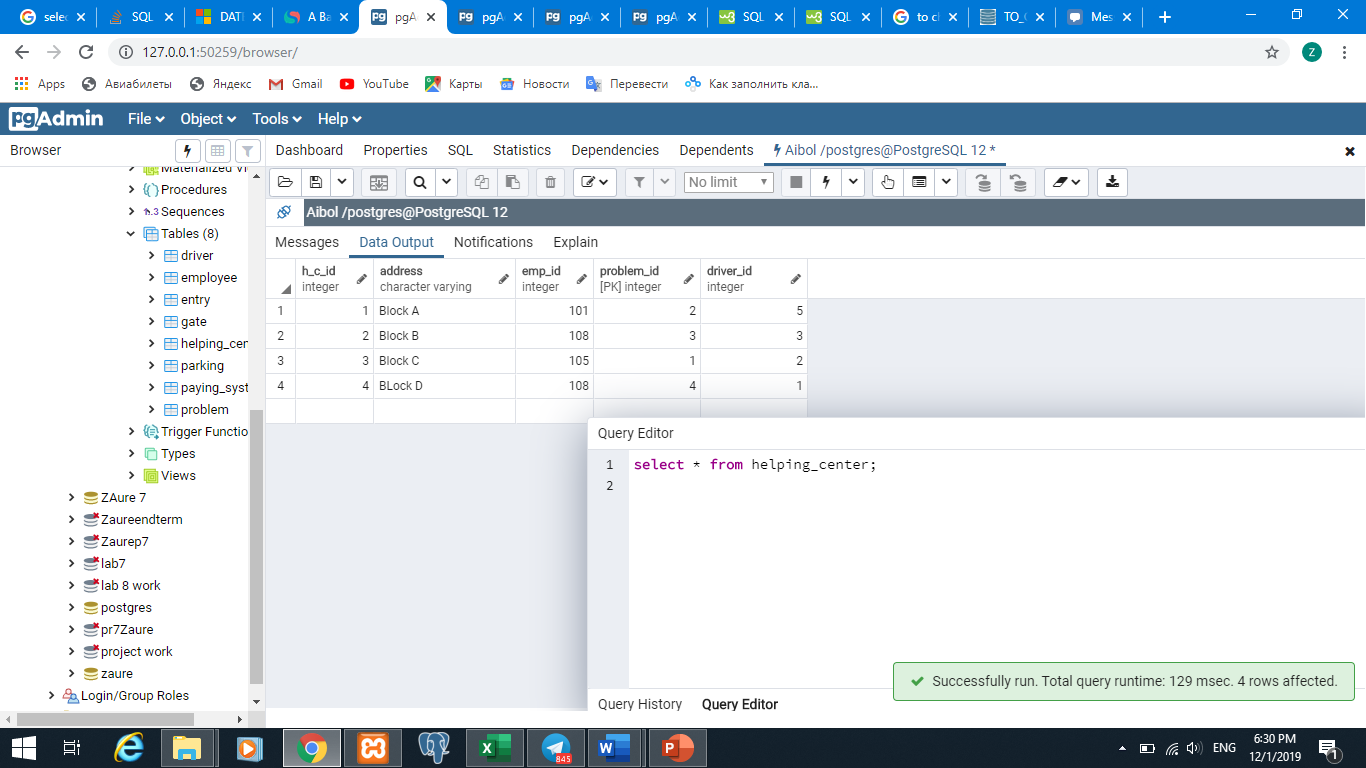
REFERENCES paying\_system (pay\_id);

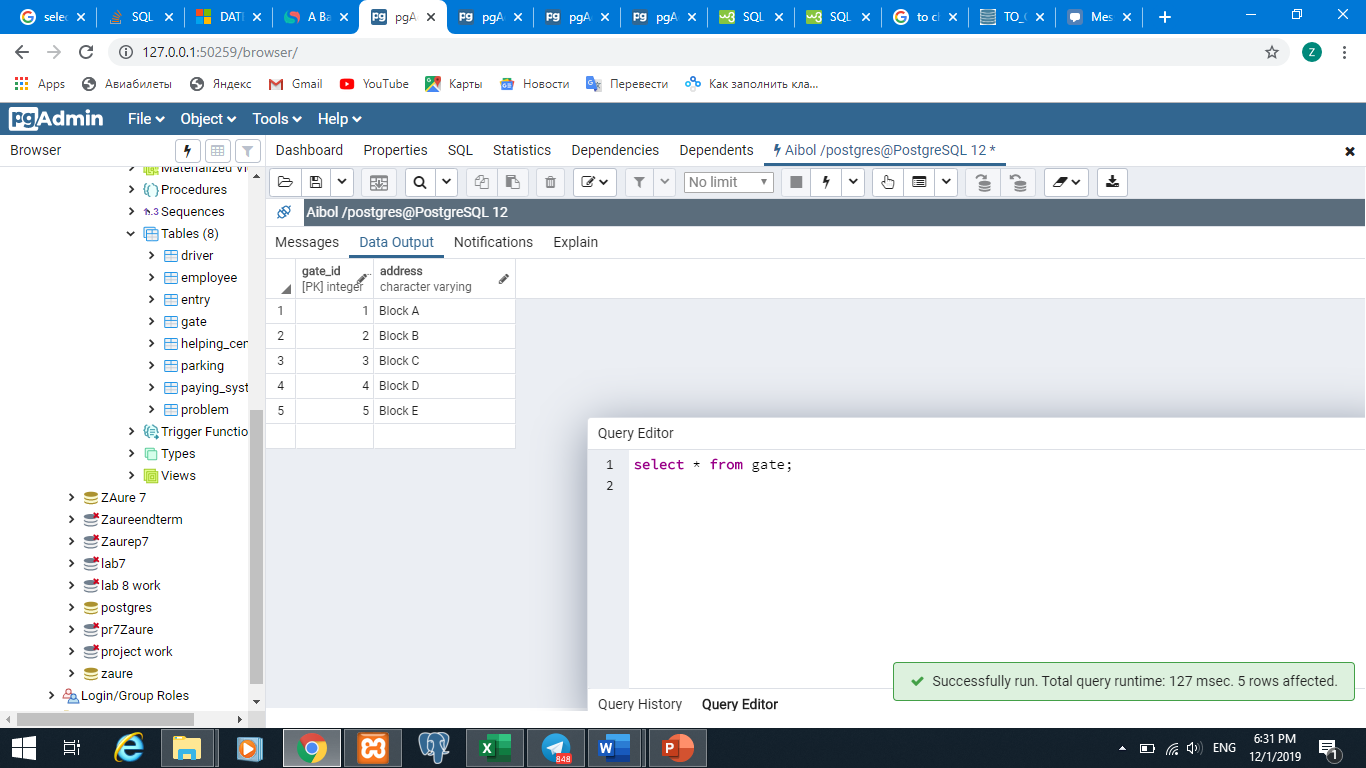


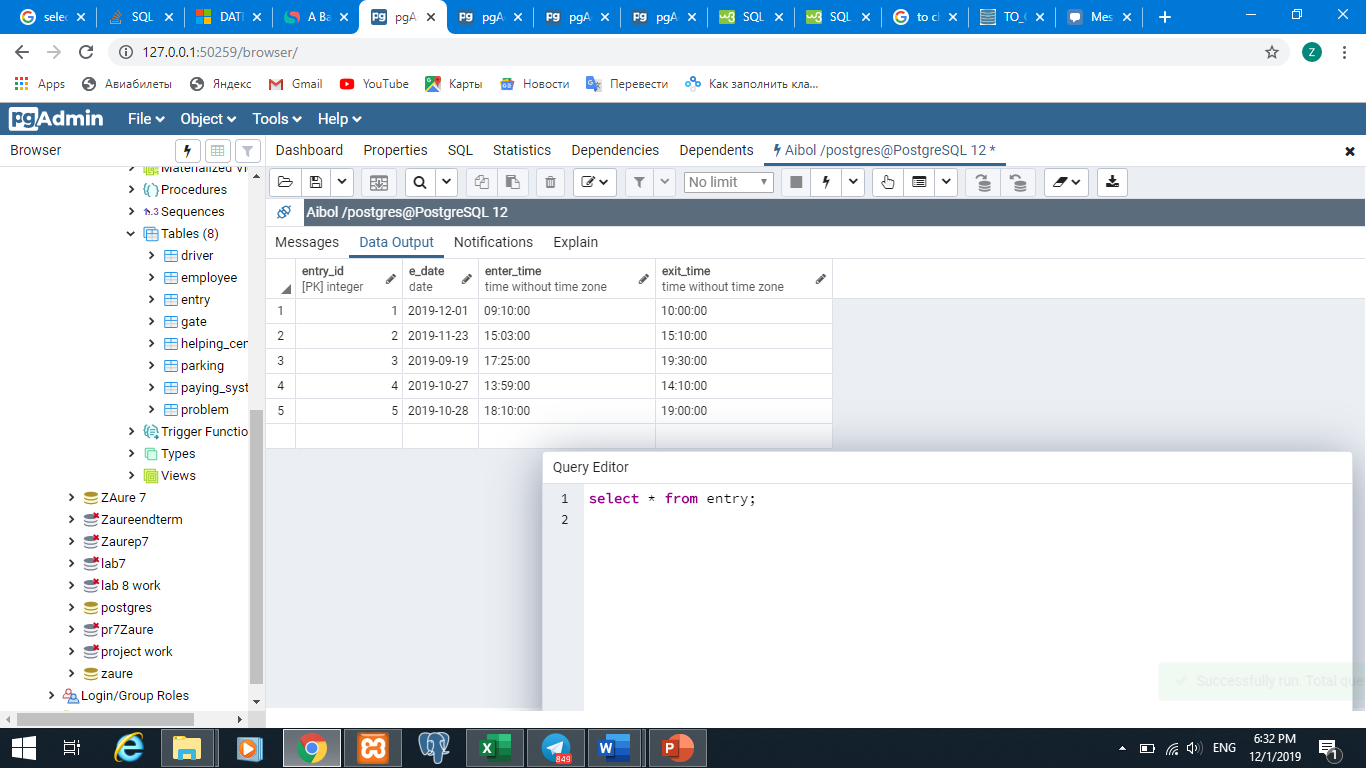




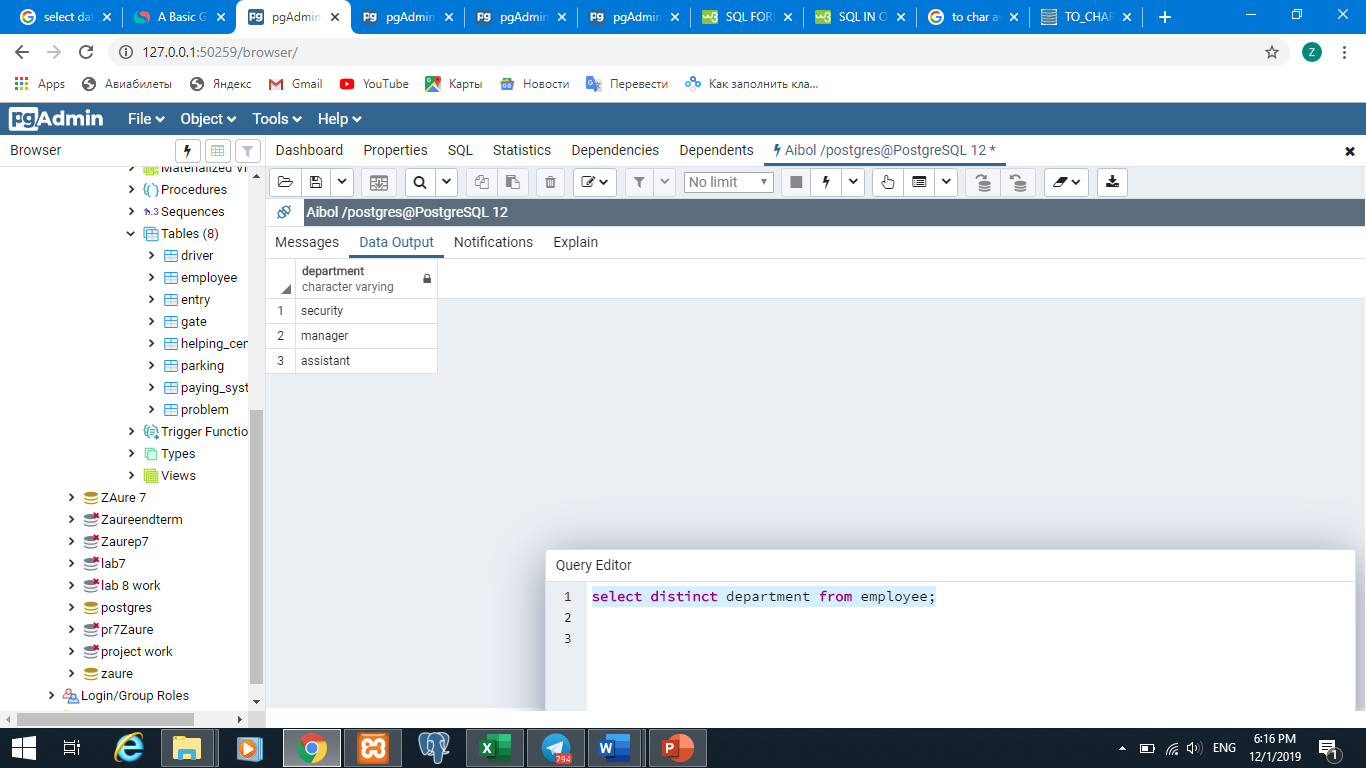






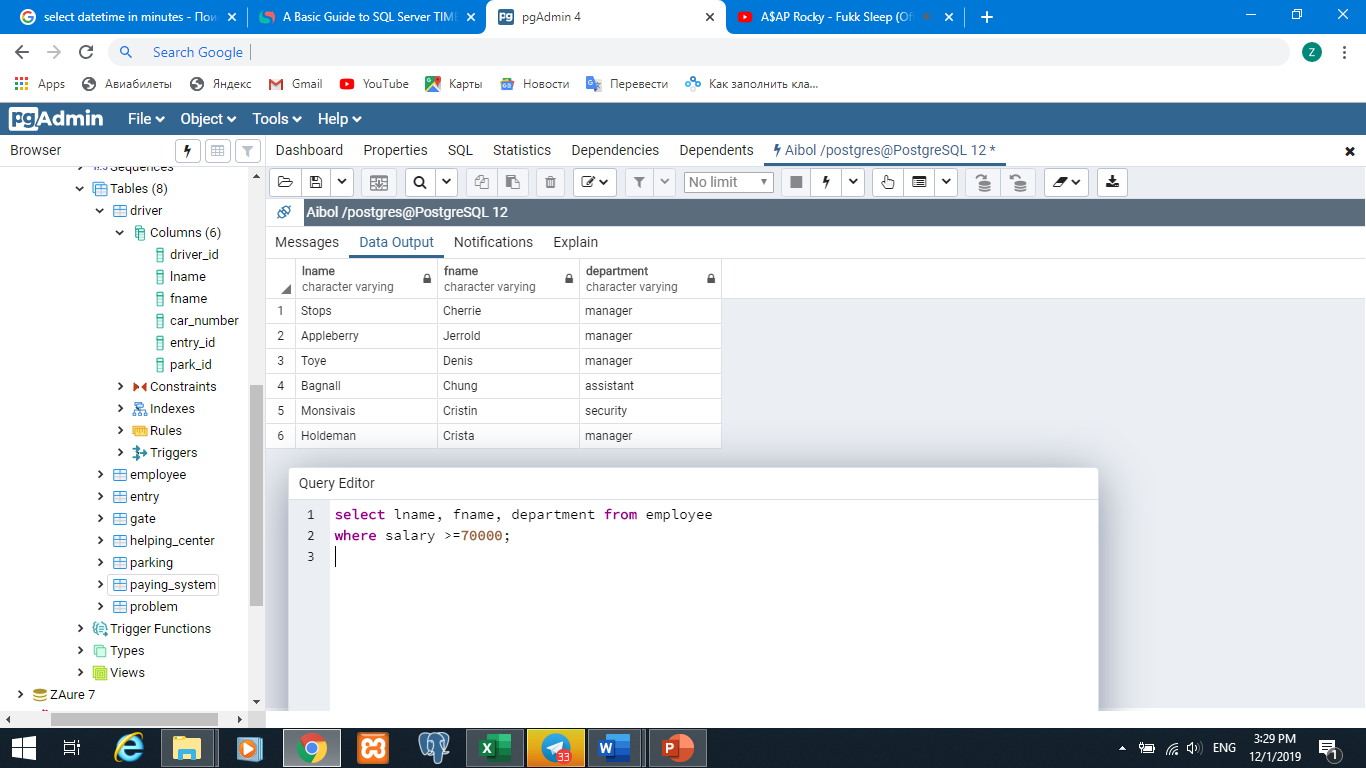


select distinct department from employee;



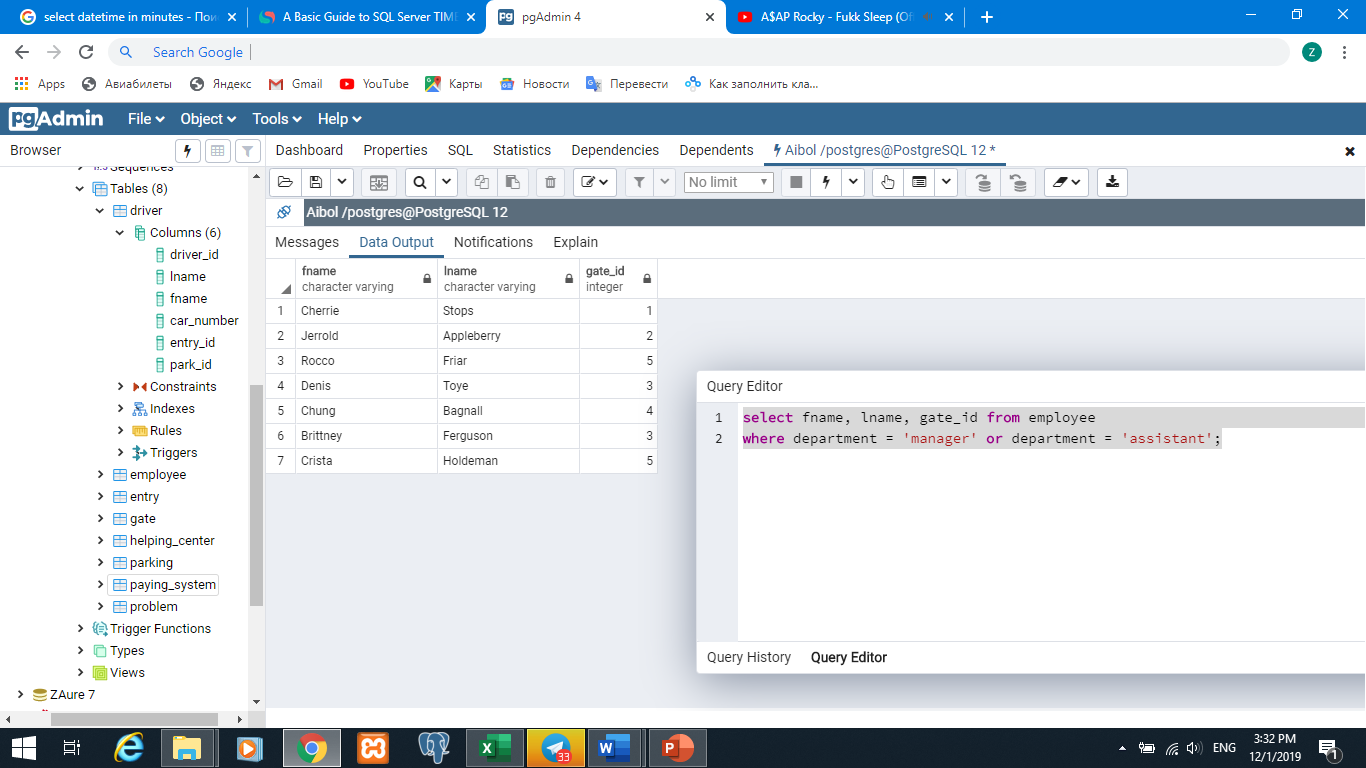
select lname, fname, department from employee

where salary >=70000;



select fname, lname, gate\_id from employee

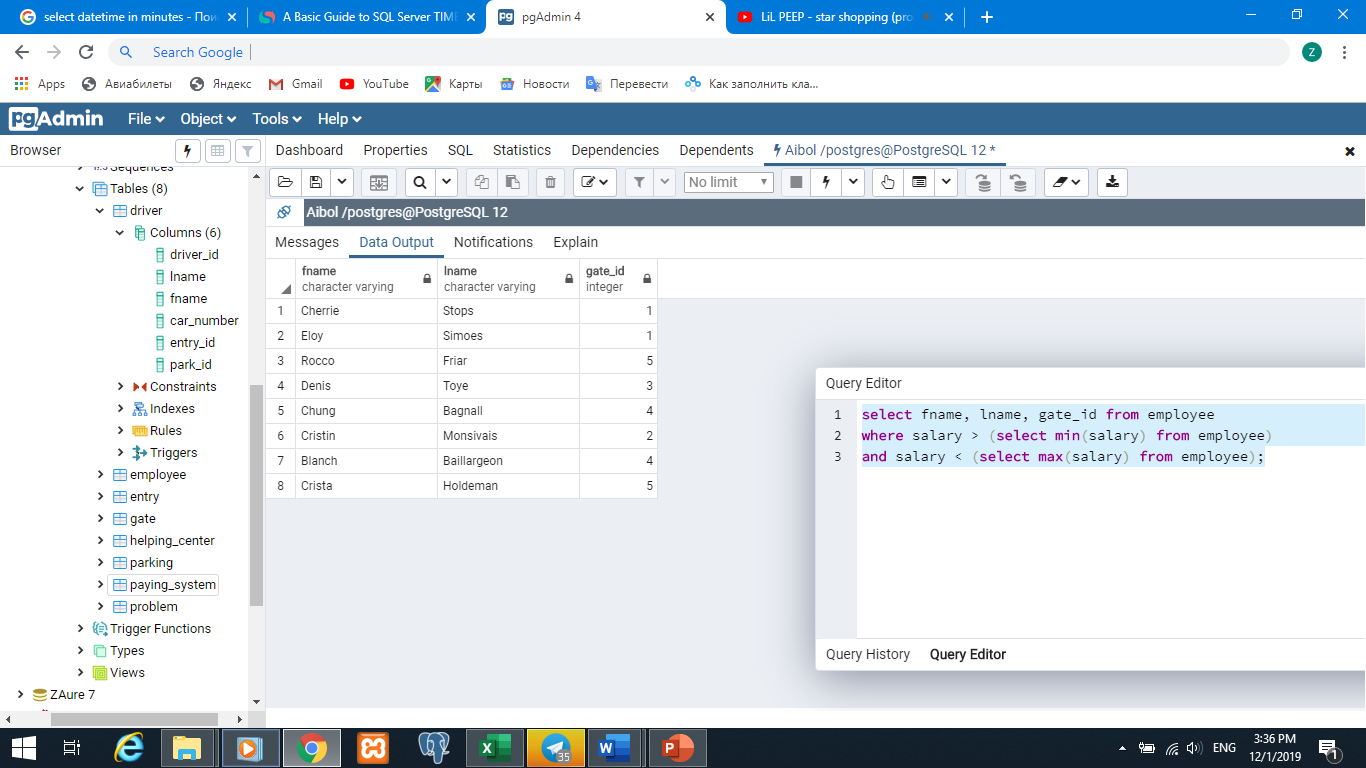
where department = 'manager' or department = 'assistant';



select fname, lname, gate\_id from employee

where salary > (select min(salary) from employee)

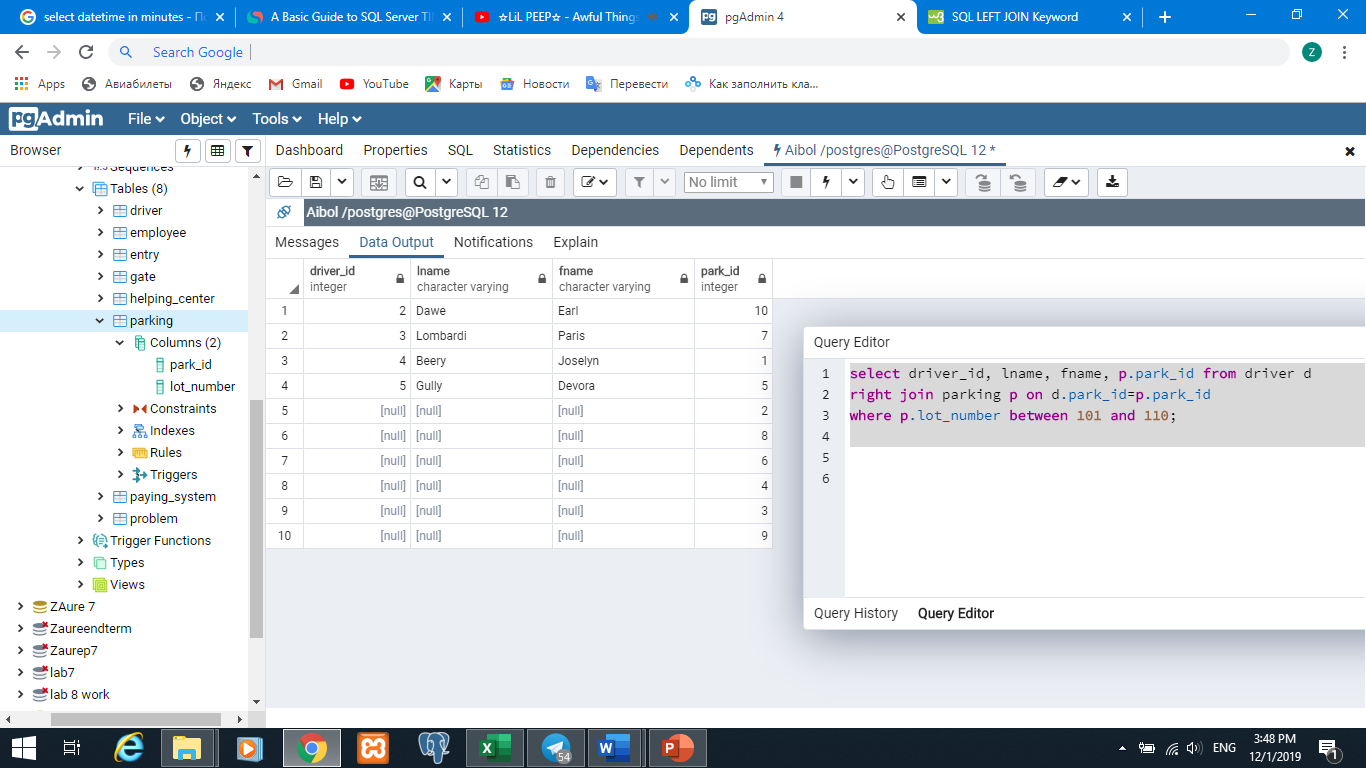
and salary < (select max(salary) from employee);



select driver\_id, lname, fname, p.park\_id from driver d

right join parking p on d.park\_id=p.park\_id

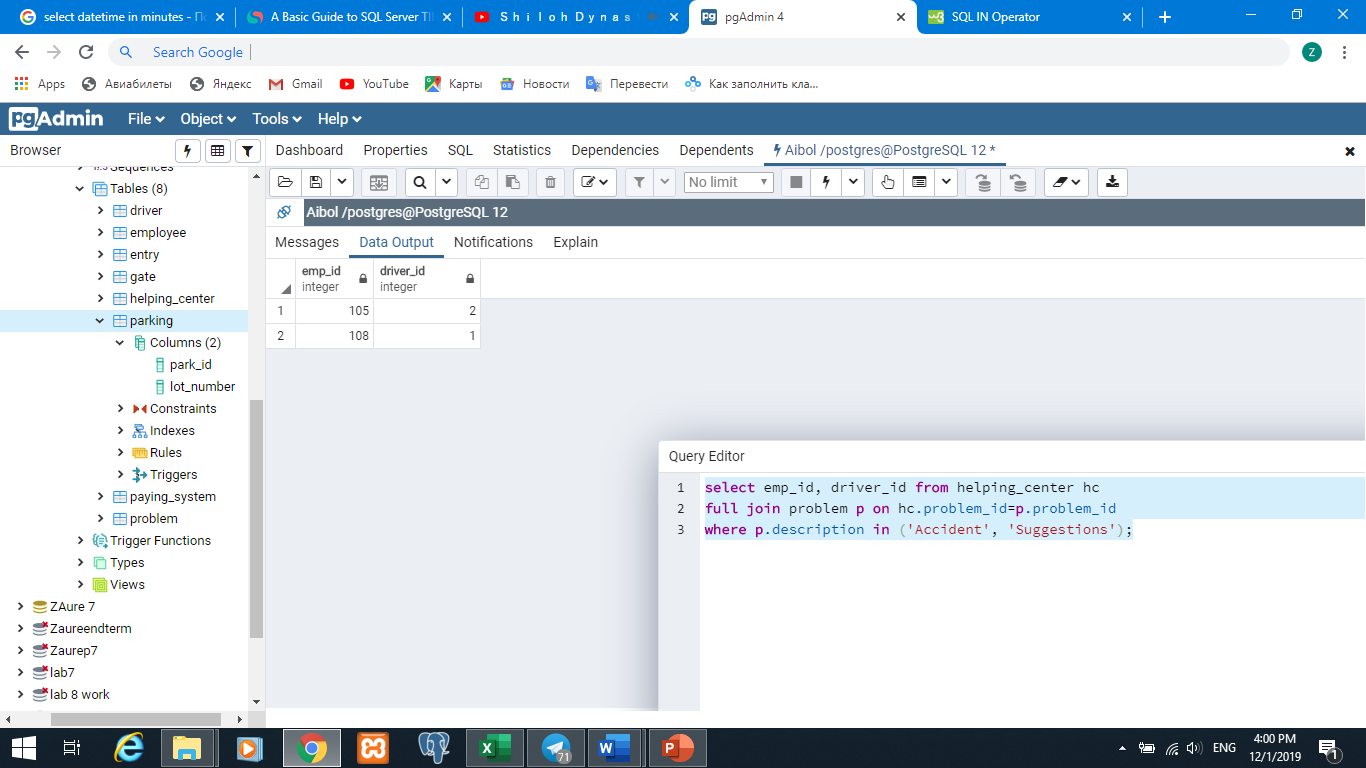
where p.lot\_number between 101 and 110;



select emp\_id, driver\_id from helping\_center hc

full join problem p on hc.problem\_id=p.problem\_id

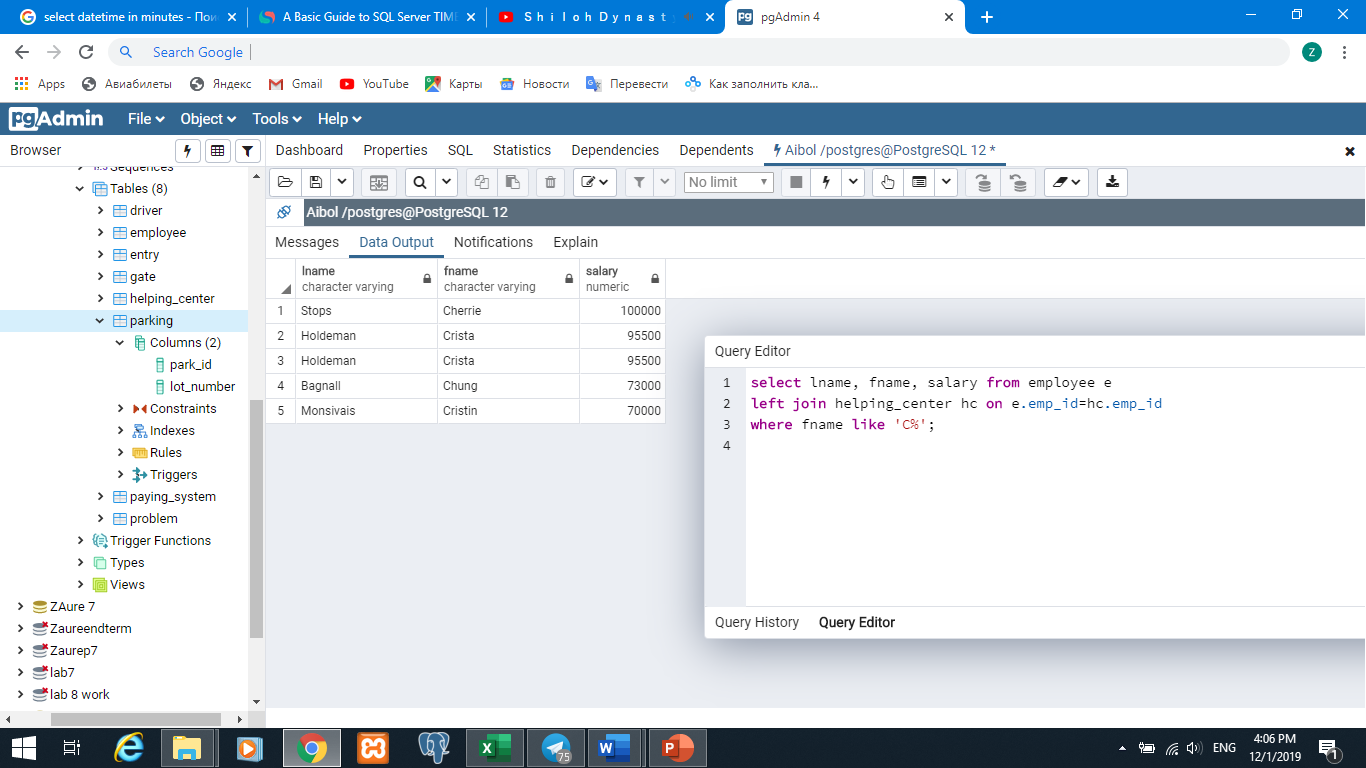
where p.description in ('Accident', 'Suggestions');



select fname,lname,salary

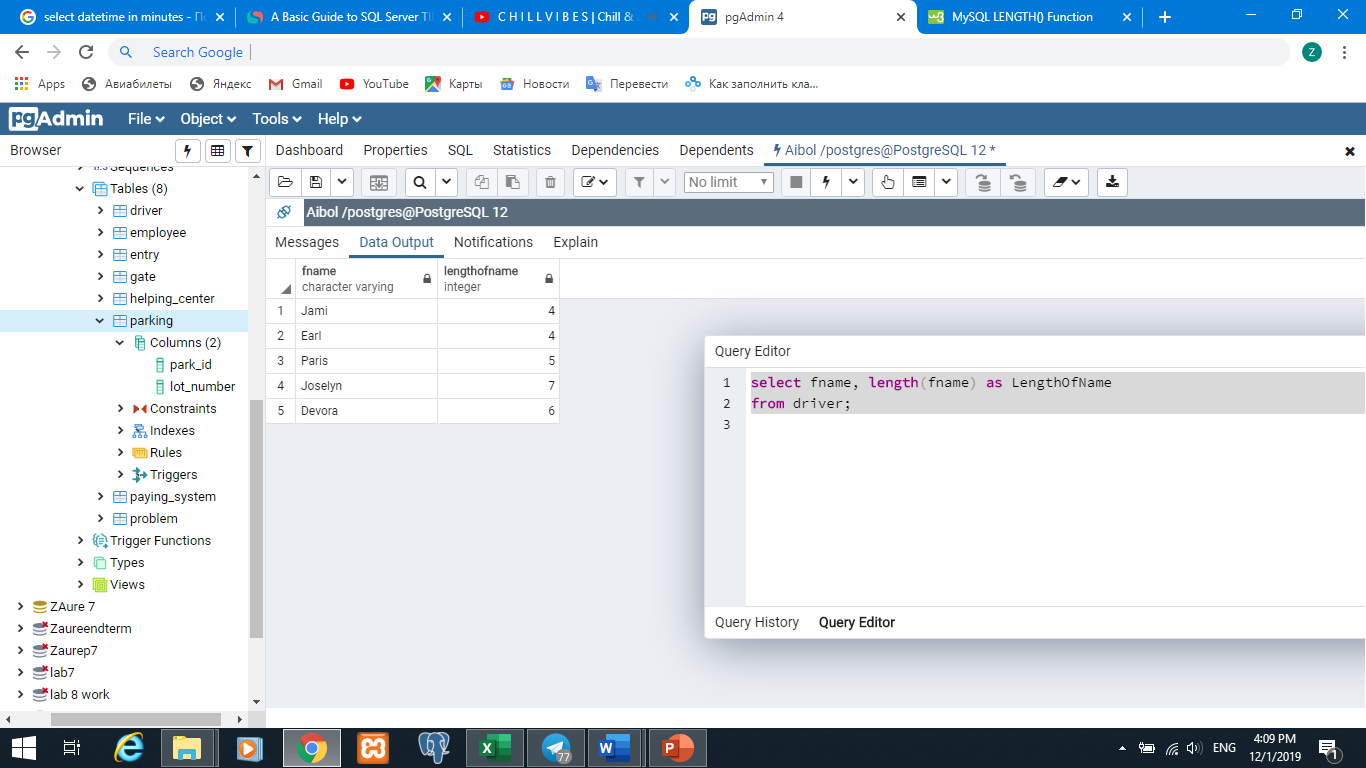
from employee

where fname like 'C%';



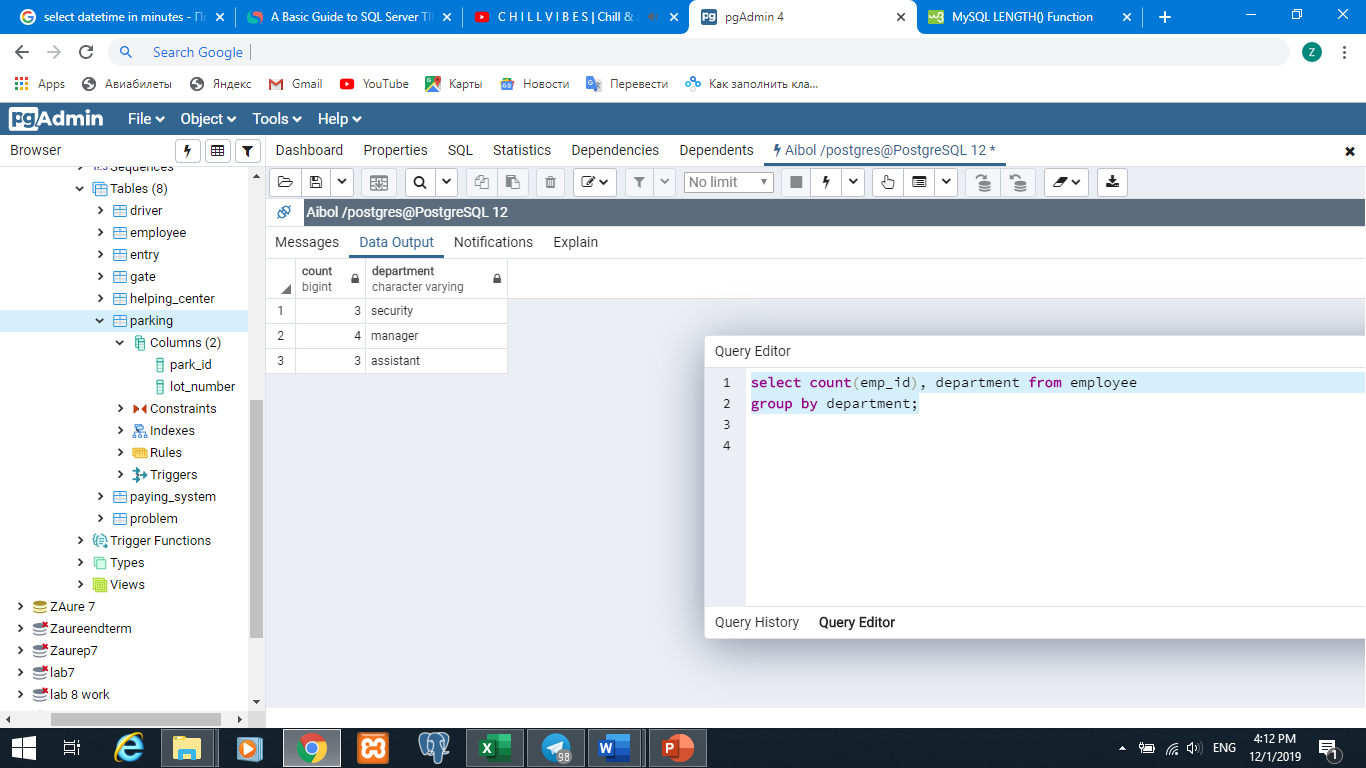
select fname, length(fname) as LengthOfName

from driver;



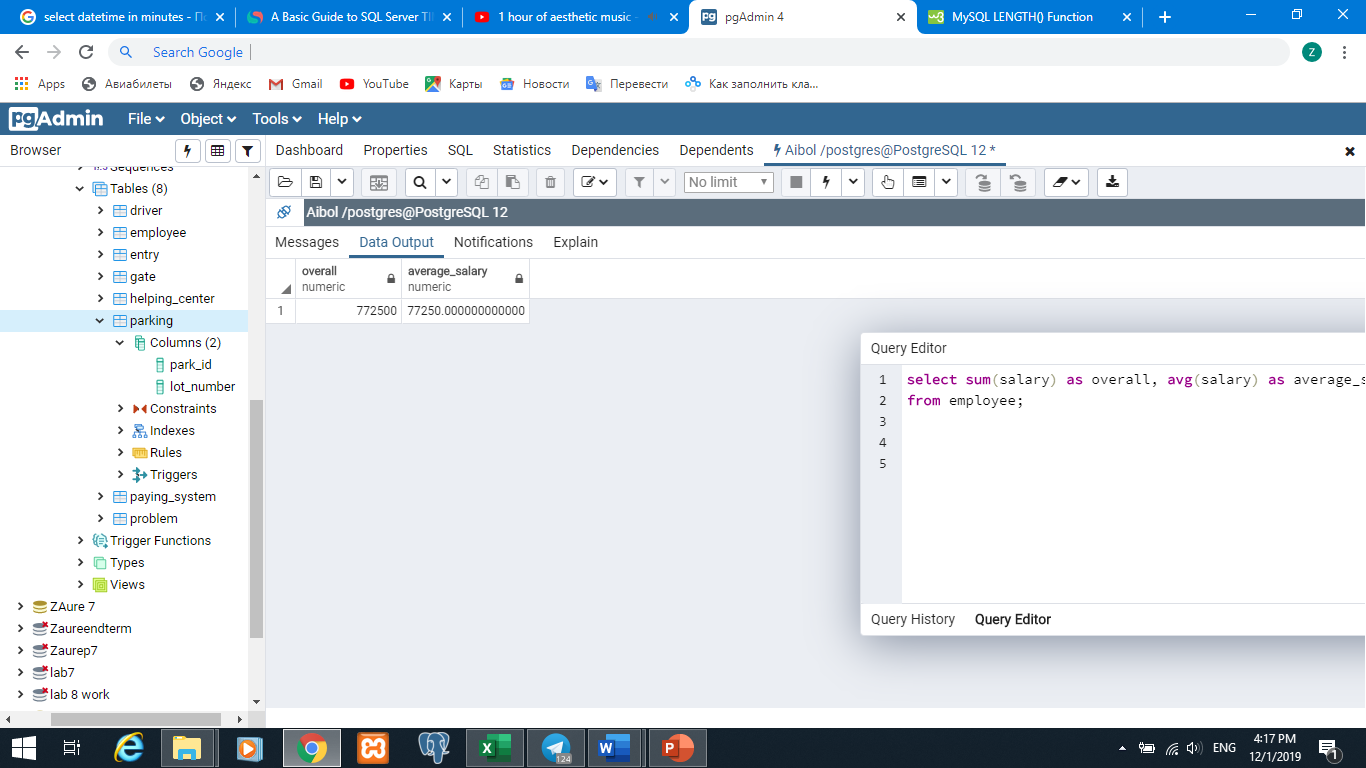
select count(emp\_id), department from employee

group by department;



select sum(salary) as overall, avg(salary) as average\_salary

from employee;



select date\_part('minutes', (exit\_time-enter\_time)::interval) as time\_on\_park, p.charge, d.driver\_id

from entry e

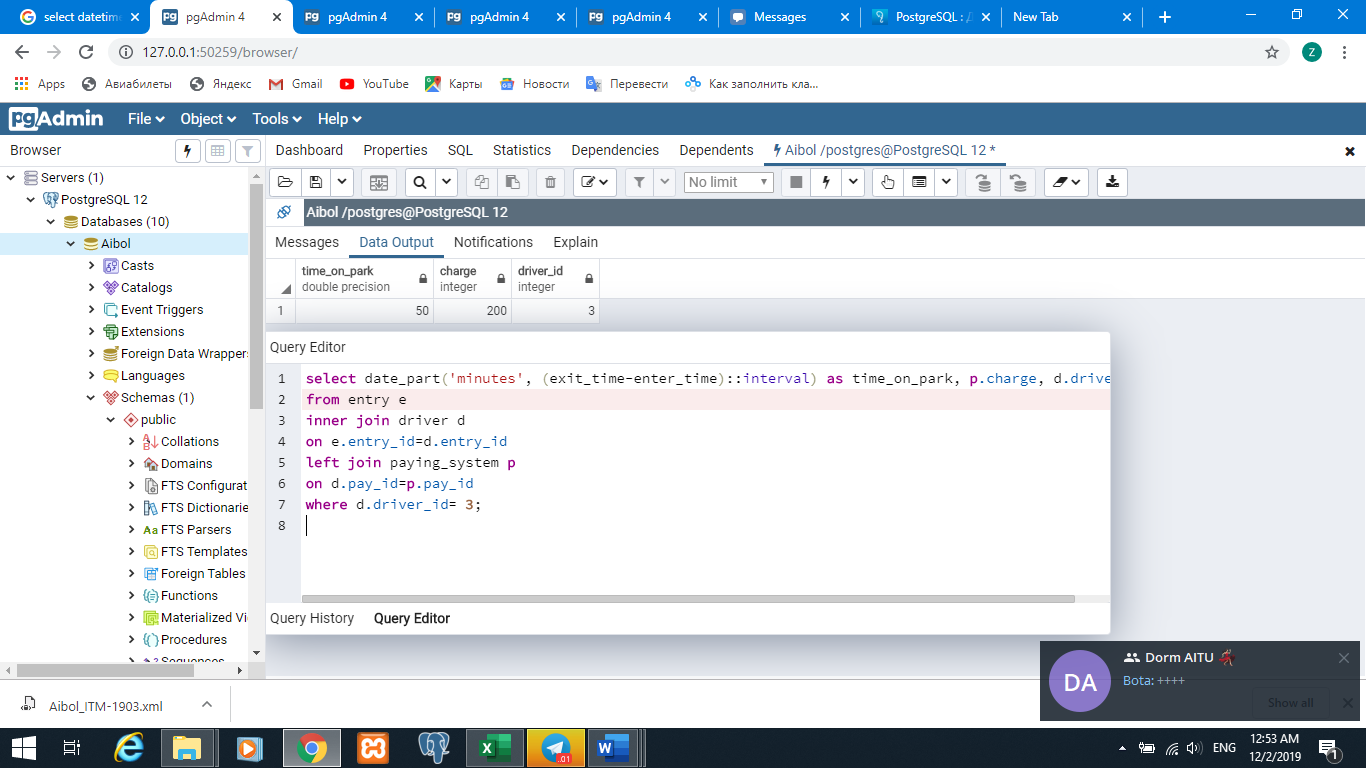
inner join driver d

on e.entry\_id=d.entry\_id

left join paying\_system p

on d.pay\_id=p.pay\_id

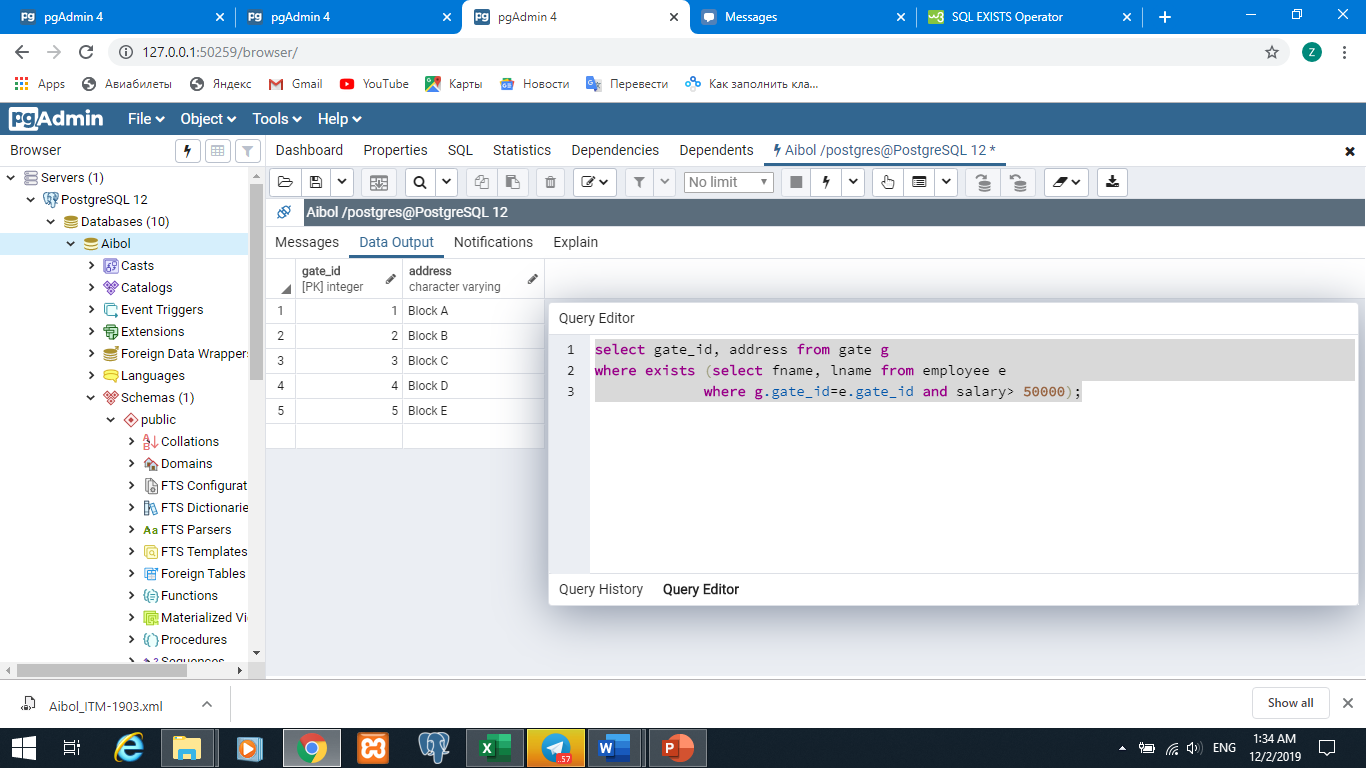
where d.driver\_id= 3;



select gate\_id, address from gate g

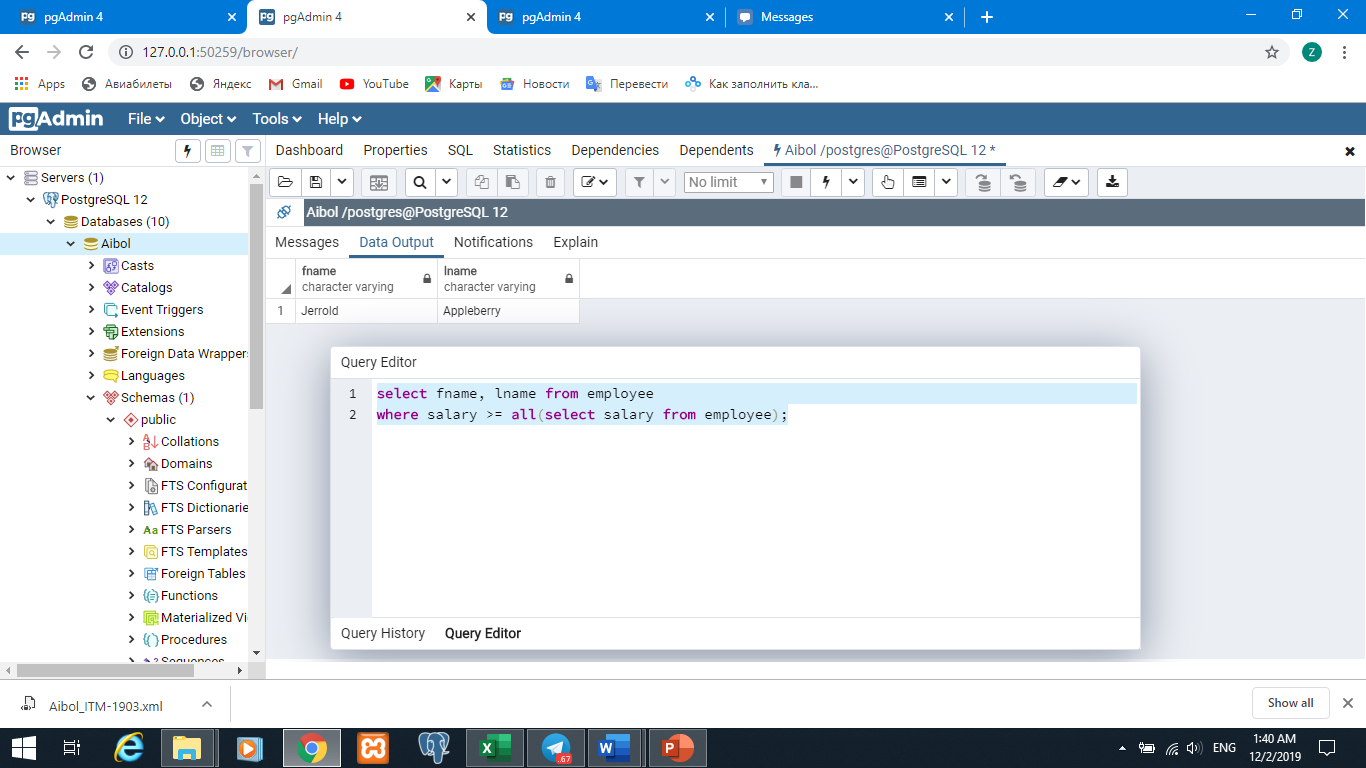
where exists (select fname, lname from employee e

where g.gate\_id=e.gate\_id and salary> 50000);



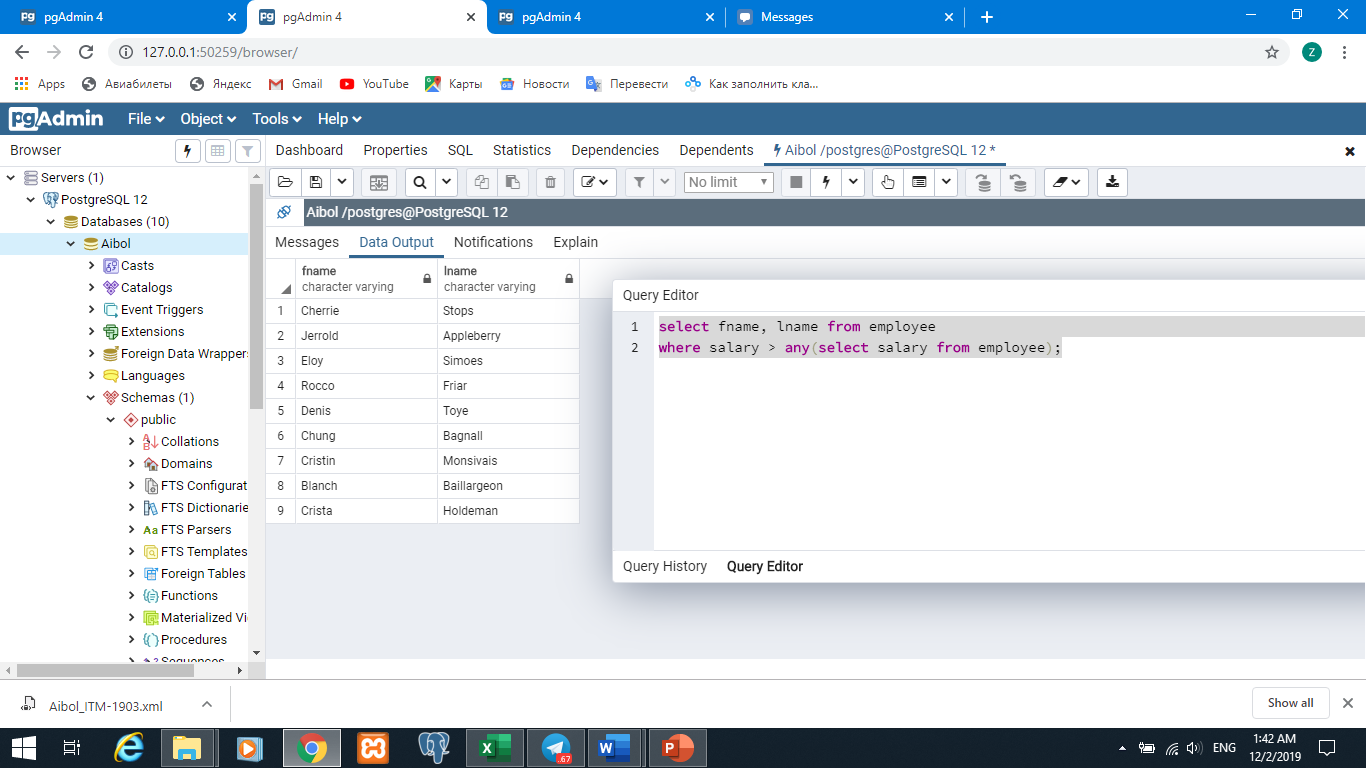
select fname, lname from employee

where salary >= all(select salary from employee);



select fname, lname from employee

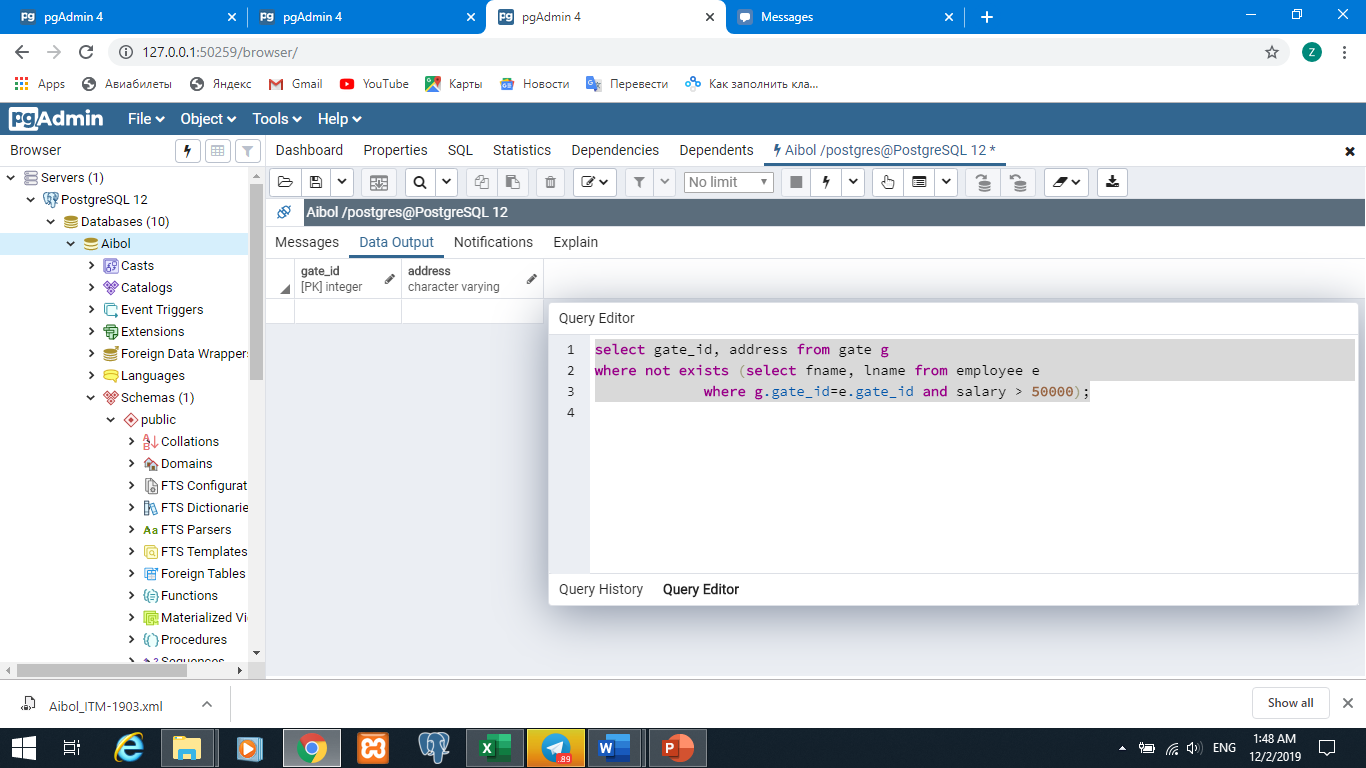
where salary > any(select salary from employee);



select gate\_id, address from gate g

where not exists (select fname, lname from employee e

where g.gate\_id=e.gate\_id and salary > 50000);



A close up of a map

Description automatically generated

A close up of a map

Description automatically generated

A picture containing sky, text, wall, indoor

Description automatically generated