Lab6

create table dealer (  
 id integer primary key ,  
 name varchar(255),  
 location varchar(255),  
 charge float  
);  
  
INSERT INTO dealer (id, name, location, charge) VALUES (101, 'Ерлан', 'Алматы', 0.15);  
INSERT INTO dealer (id, name, location, charge) VALUES (102, 'Жасмин', 'Караганда', 0.13);  
INSERT INTO dealer (id, name, location, charge) VALUES (105, 'Азамат', 'Нур-Султан', 0.11);  
INSERT INTO dealer (id, name, location, charge) VALUES (106, 'Канат', 'Караганда', 0.14);  
INSERT INTO dealer (id, name, location, charge) VALUES (107, 'Евгений', 'Атырау', 0.13);  
INSERT INTO dealer (id, name, location, charge) VALUES (103, 'Жулдыз', 'Актобе', 0.12);  
  
create table client (  
 id integer primary key ,  
 name varchar(255),  
 city varchar(255),  
 priority integer,  
 dealer\_id integer references dealer(id)  
);  
  
INSERT INTO client (id, name, city, priority, dealer\_id) VALUES (802, 'Айша', 'Алматы', 100, 101);  
INSERT INTO client (id, name, city, priority, dealer\_id) VALUES (807, 'Даулет', 'Алматы', 200, 101);  
INSERT INTO client (id, name, city, priority, dealer\_id) VALUES (805, 'Али', 'Кокшетау', 200, 102);  
INSERT INTO client (id, name, city, priority, dealer\_id) VALUES (808, 'Ильяс', 'Нур-Султан', 300, 102);  
INSERT INTO client (id, name, city, priority, dealer\_id) VALUES (804, 'Алия', 'Караганда', 300, 106);  
INSERT INTO client (id, name, city, priority, dealer\_id) VALUES (809, 'Саша', 'Шымкент', 100, 103);  
INSERT INTO client (id, name, city, priority, dealer\_id) VALUES (803, 'Маша', 'Семей', 200, 107);  
INSERT INTO client (id, name, city, priority, dealer\_id) VALUES (801, 'Максат', 'Нур-Султан', null, 105);  
  
create table sell (  
 id integer primary key,  
 amount float,  
 date timestamp,  
 client\_id integer references client(id),  
 dealer\_id integer references dealer(id)  
);  
  
INSERT INTO sell (id, amount, date, client\_id, dealer\_id) VALUES (201, 150.5, '2012-10-05 00:00:00.000000', 805, 102);  
INSERT INTO sell (id, amount, date, client\_id, dealer\_id) VALUES (209, 270.65, '2012-09-10 00:00:00.000000', 801, 105);  
INSERT INTO sell (id, amount, date, client\_id, dealer\_id) VALUES (202, 65.26, '2012-10-05 00:00:00.000000', 802, 101);  
INSERT INTO sell (id, amount, date, client\_id, dealer\_id) VALUES (204, 110.5, '2012-08-17 00:00:00.000000', 809, 103);  
INSERT INTO sell (id, amount, date, client\_id, dealer\_id) VALUES (207, 948.5, '2012-09-10 00:00:00.000000', 805, 102);  
INSERT INTO sell (id, amount, date, client\_id, dealer\_id) VALUES (205, 2400.6, '2012-07-27 00:00:00.000000', 807, 101);  
INSERT INTO sell (id, amount, date, client\_id, dealer\_id) VALUES (208, 5760, '2012-09-10 00:00:00.000000', 802, 101);  
INSERT INTO sell (id, amount, date, client\_id, dealer\_id) VALUES (210, 1983.43, '2012-10-10 00:00:00.000000', 804, 106);  
INSERT INTO sell (id, amount, date, client\_id, dealer\_id) VALUES (203, 2480.4, '2012-10-10 00:00:00.000000', 809, 103);  
INSERT INTO sell (id, amount, date, client\_id, dealer\_id) VALUES (212, 250.45, '2012-06-27 00:00:00.000000', 808, 102);  
INSERT INTO sell (id, amount, date, client\_id, dealer\_id) VALUES (211, 75.29, '2012-08-17 00:00:00.000000', 803, 107);  
INSERT INTO sell (id, amount, date, client\_id, dealer\_id) VALUES (213, 3045.6, '2012-04-25 00:00:00.000000', 802, 101);  
  
-- drop table client;  
-- drop table dealer;  
-- drop table sell;  
  
--1)  
--a  
select \*  
from dealer  
cross join client;  
--b  
select dealer.id, dealer.name,dealer.location,dealer.charge,client.id, client.name, client.city, client.priority, sell.id, sell.date, sell.amount  
from dealer  
inner join client on dealer.id = client.dealer\_id inner join sell on client.id = sell.client\_id;  
--c  
select dealer.id,dealer.name , client.id,client.name  
from dealer  
inner join client on dealer.location=client.city;  
--d  
select sell.id,sell.amount,client.name,client.city  
from sell  
inner join client on sell.client\_id=client.id  
where sell.amount between 100 and 500;  
--e  
select distinct on (dealer.id) dealer.id,dealer.name,client.id,client.name  
from dealer  
left join client on dealer.id = client.dealer\_id;  
--f  
select dealer.id,dealer.name,client.name,client.city,dealer.charge  
from dealer  
left join client on dealer.id = client.dealer\_id;  
--g  
select dealer.id,dealer.name,client.name,client.city,dealer.charge  
from dealer  
inner join client on dealer.id = client.dealer\_id  
where dealer.charge>0.12;  
--h  
select distinct on (client.id) client.id,client.name,client.city,sell.id,sell.date,sell.amount,dealer.id,dealer.name,dealer.charge  
from client  
left join sell on client.id = sell.client\_id  
left join dealer on sell.dealer\_id=dealer.id;  
--i  
select dealer.id,dealer.name,client.id,client.name,client.priority,sell.id,sell.amount  
from dealer  
inner join client on dealer.id = client.dealer\_id  
left join sell on client.id = sell.client\_id;  
  
--2)  
--a  
create view aa as  
select date,*count*(distinct client\_id),*avg*(amount),*sum*(amount)  
from sell  
group by date;  
--b  
create view bb as  
select date, *sum*(amount)  
from sell  
group by date  
order by *sum*(amount) desc limit 5;  
--c  
create view cc as  
select dealer\_id,*count*(id),*avg*(amount),*sum*(amount)  
from sell  
where dealer\_id is not null  
group by dealer\_id;  
--d  
create view dd as  
select dealer.location, *sum*(dealer.charge\*sell.amount)  
from dealer  
left join sell on dealer.id = sell.dealer\_id  
group by dealer.location;  
--e  
create view ee as  
select dealer.location,*count*(sell.id),*avg*(sell.amount),*sum*(sell.amount)  
from dealer  
left join sell on dealer.id = sell.dealer\_id  
group by dealer.location;  
--f  
create view ff as  
select client.city,*count*(sell.id),*avg*(sell.amount),*sum*(sell.amount)  
from client  
left join sell on client.id = sell.client\_id  
group by client.city;  
--g  
create view gg as  
select client.city  
from client  
inner join sell on client.id = sell.client\_id  
group by client.city  
having *sum*(sell.amount) > (select *sum*(sell.amount)  
 from dealer  
 inner join sell on dealer.id = sell.dealer\_id  
 where client.city = dealer.location  
 group by dealer.location);