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.

select \* from dealer cross join client;

select dealer.id, dealer.name, 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;

select dealer.id, dealer.name, client.id, client.name from dealer inner join client on dealer.location = client.city;

select sell.id, sell.amount, client.id, client.name, client.city from sell inner join client on sell.client\_id = client.id where sell.amount between 100 and 500;

select distinct on (dealer.id) dealer.id, dealer.name, client.id, client.name from dealer left join client on dealer.id = client.dealer\_id;

select dealer.id, dealer.name, client.id, client.name, client.city, dealer.charge from dealer left join client on dealer.id = client.dealer\_id;

select dealer.id, dealer.name, client.id, client.name, client.city, dealer.charge from dealer inner join client on dealer.id = client.dealer\_id where dealer.charge > 0.12;

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;

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.

create view a as select date, count(distinct client\_id), avg(amount), sum(amount) from sell group by date;

create view b as select date, sum(amount) from sell group by date order by sum(amount) desc limit 5;

create view c as select dealer\_id, count(id), avg(amount), sum(amount) from sell where dealer\_id is not null group by dealer\_id;

create view d as select dealer.location, sum(dealer.charge\*sell.amount) from dealer left join sell on dealer.id = sell.dealer\_id group by dealer.location;

create view e 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;

create view f 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;

create view g as select a.city from client a inner join sell on a.id = sell.client\_i group by a.city having sum(sell.amount) > (select sum(sell.amount) from dealer b inner join sell on b.id = sell.dealer\_id where a.city = b.location group by b.location);