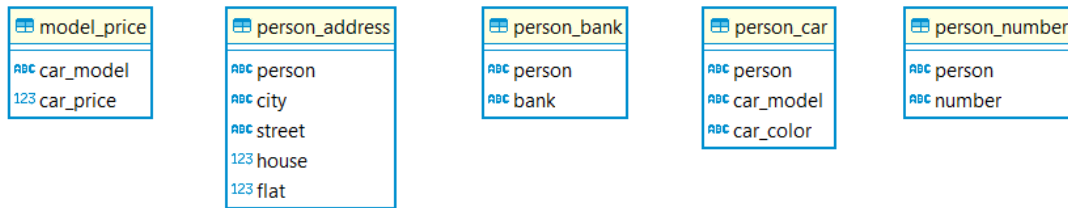


Сущности базы данных



1) Создание

domains person, number = string. city, street = string. house, flat = unsigned. address = address(city, street, house, flat). car_model, car_color, bank = string. car_price, bank_sum = unsigned.	
predicates person_number(person, number).	create table person_number (person text, number text);
person_car(person, car_model, car_color).	create table person_car (person text, car_model text, car_color text);
model_price(car_model, car_price).	create table model_price (car_model text, car_price integer);
person_bank(person, bank).	create table person_bank (person text, bank text);
person_address(person, address).	create table person_address (person text, city text, street text, house integer, flat integer);
number_car(number, person, car_model, car_price). person_city_street_bank_number(person, city, street, bank, number). car_person_city_number_bank(car_model, car_color, person, city, number, bank).	

2) Заполнение

clauses person_number("Klimov", "89124214959"). person_number("Ivanov", "89424412959"). person_number("Klimov", "89414215521"). person_number("Petrov", "89412451252").	insert into person_number(person, number) values('Klimov', '89124214959'); insert into person_number(person, number) values('Ivanov', '89424412959'); insert into person_number(person, number) values('Klimov', '89414215521'); insert into person_number(person, number) values('Petrov', '89412451252');
person_car("Ivanov", "Audi", "Black"). person_car("Klimov", "Nissan", "White"). person_car("Petrov", "BMW", "Green"). person_car("Klimov", "BMW", "Green").	insert into person_car(person, car_model, car_color) values('Ivanov', 'Audi', 'Black'); insert into person_car(person, car_model, car_color) values('Klimov', 'Nissan', 'White'); insert into person_car(person, car_model, car_color) values('Petrov', 'BMW', 'Green'); insert into person_car(person, car_model, car_color) values('Klimov', 'BMW', 'Green');
model_price("BMW", 500000). model_price("Audi", 400000). model_price("Nissan", 200000).	insert into model_price(car_model, car_price) values('BMW', 500000); insert into model_price(car_model, car_price) values('Audi', 400000); insert into model_price(car_model, car_price) values('Nissan', 200000);
person_bank("Petrov", "Sber"). person_bank("Klimov", "Tinkoff"). person_bank("Klimov", "Alpha"). person_bank("Ivanov", "Sber").	insert into person_bank(person, bank) values('Petrov', 'Sber'); insert into person_bank(person, bank) values('Klimov', 'Tinkoff'); insert into person_bank(person, bank) values('Klimov', 'Alpha'); insert into person_bank(person, bank) values('Ivanov', 'Sber');
person_address("Klimov", address("Moscow", "Street_1", 1, 12)). person_address("Ivanov", address("Moscow", "Street_2", 2, 32)). person_address("Petrov", address("St.Peterburg", "Street_3", 3, 42)).	insert into person_address(person, city, street, house, flat) values('Klimov', 'Moscow', 'Street_1', 1, 12); insert into person_address(person, city, street, house, flat) values('Ivanov', 'Moscow', 'Street_2', 2, 32); insert into person_address(person, city, street, house, flat) values('Petrov', 'St.Peterburg', 'Street_3', 3, 42);

<pre> person_address("Klimov", address("St. Peterburg", "Street_4", 4, 52)). </pre>	<pre> insert into person_address(person, city, street, house, flat) values('Klimov', 'St.Peterburg', 'Street_4', 4, 52); </pre>
<pre> number_car(Number, Person, Car_model, Car_price) :- person_number(Person, Number), person_car(Person, Car_model, _), model_price(Car_model, Car_price). person_city_street_bank_number(Person, City, Street, Bank, Number) :- person_address(Person, address(City, Street, _, _)), person_bank(Person, Bank), person_number(Person, Number). car_person_city_number_bank(Model, Color, Person, City, Number, Bank) :- person_car(Person, Model, Color), person_address(Person, address(City, _, _, _)), person_number(Person, Number), person_bank(Person, Bank). </pre>	

3) Поиск

<pre> goal number_car("89124214959", Person, Model, Price). </pre>	<pre> select pn.person, pc.car_model, mp.car_price from (select * from person_number where number = '89124214959') pn join person_car pc on pn.person = pc.person join model_price mp on pc.car_model = mp.car_model; </pre>
<pre> number_car("89424412959", _, Model, _). </pre>	<pre> select pc.car_model from (select * from person_number where number = '89424412959') pn join person_car pc on pn.person = pc.person; </pre>
<pre> person_city_street_bank_number("Klimov", "Moscow", Street, Bank, Number). </pre>	<pre> select pa.street, pb.bank, pn.number from (select person, street from person_address where person = 'Klimov' and city = 'Moscow') pa join person_bank pb on pa.person = pb.person join person_number pn on pa.person = pn.person; </pre>
<pre> car_person_city_number_bank("BMW", "Green", Person, City, Number, Bank). </pre>	<pre> select pc.person, pa.city, pn.number, pb.bank from (select person from person_car where car_model = 'BMW' and car_color = 'Green') pc join person_address pa on pc.person = pa.person join person_number pn on pc.person = pn.person join person_bank pb on pc.person = pb.person; </pre>

car_person_city_number_bank("Audi", "Black", Person, City, Number, Bank).	select pc.person, pa.city, pn.number, pb.bank from (select person from person_car where car_model = 'Audi' and car_color = 'Black') pc join person_address pa on pc.person = pa.person join person_number pn on pc.person = pn.person join person_bank pb on pc.person = pb.person;
car_person_city_number_bank("BMW", "White", Person, City, Number, Bank).	select pc.person, pa.city, pn.number, pb.bank from (select person from person_car where car_model = 'BMW' and car_color = 'White') pc join person_address pa on pc.person = pa.person join person_number pn on pc.person = pn.person join person_bank pb on pc.person = pb.person;