

## درس پایگاه داده ها، استاد فرضی

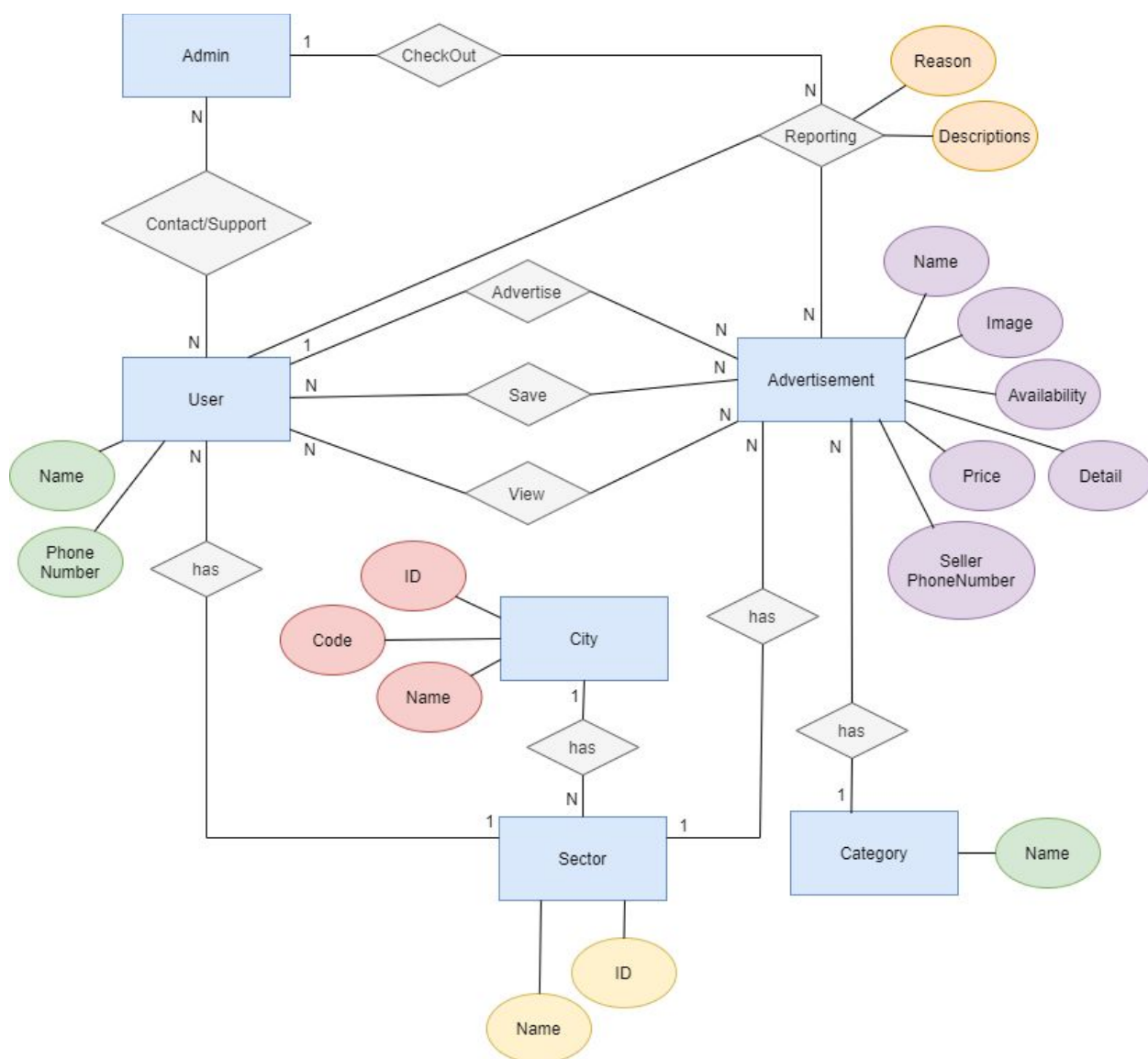
فاز دوم پروژه: پیاده سازی بخشی از مدل مفهومی داده سایت دیوار در پایگاه داده

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(از پایگاه داده ی MySQL استفاده شده است)

• عکس ER طراحی شده در فاز اول پروژه:



پایگاه داده ای به نام **divarDB** ایجاد کردیم. حال باید جدول های خواسته شده را ایجاد کنیم.

```
create database divarDB;
```

جدول های خواسته شده در پروژه:

- خودرو
- خودرو سواری
- خودرو سنگین
- املاک
- فروش مسکونی
- اجاره مسکونی
- فروش اداری و تجاری

این جدول ها را به همراه جدول های داخل ER در MySQL پیاده سازی کردیم:

جدول **user**: (حاوی آیدی، نام و شماره تلفن کاربران)

```
3 • ○ create table divarDB.user(  
4     id int not null auto_increment primary key,  
5     name varchar(45) not null,  
6     phone_number varchar(11)  
7  
8 ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

برای این جدول تعدادی رکورد درج میکنیم:

```
10 • INSERT INTO divarDB.user (name, phone_number)
11 VALUES ('Marti Cull', '09196288061'),
12 ('Katrina Bolland', '09351523199'),
13 ('Tomoko Marley', '09301154134'),
14 ('Refugio Kerschner', '09214466413'),
15 ('Sharyl Laforge', '09108877703'),
16 ('Deedee Krout', '09311220022'),
17 ('Deneen Zahl', '09215607058'),
18 ('Tennille Crane', '09245382862'),
19 ('Simonne Bonavita', '09216687830'),
20 ('Eustolia Nagao', '09285905323'),
21 ('Raven Lapeyrouse', '09432227422'),
22 ('Samira Corney', '09196644428'),
23 ('Douglass Abdulla', '09337734415'),
24 ('Hans Gorgone', '09288847432'),
25 ('Franklin Seawright', '09312725288'),
26 ('Marna Wilbourn', '09358729455'),
27 ('Wm Moorefield', '09218821231'),
28 ('Vina Centeno', '09205637524'),
29 ('Abraham Poisson', '09228872910'),
30 ('Dawn Meinke', '09238850380'),
31 ('Mariella Bender', '09365556864'),
32 ('Emanuel Hartman', '09215555487'),
33 ('Pedro Redmond', '09385558303'),
34 ('Lilia Clarke', '09385558303');
```

و به همین شکل جدول **city** را ایجاد و مقدار دهی می کنیم: (حاوی آیدی و نام شهر)

```
37 ● ○ create table divarDB.city(  
38     id int not null auto_increment primary key,  
39     name varchar(45) not null  
40  
41 ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;  
42  
43  
44 ● INSERT INTO divarDB.City(name)  
45 VALUES ('Yazd'),  
46 ('Tehran'),  
47 ('Karaj'),  
48 ('Shiraz'),  
49 ('Ghom'),  
50 ('Rasht'),  
51 ('Mashhad'),  
52 ('Isfahan'),  
53 ('Tabriz'),  
54 ('Ahvaz'),  
55 ('Gorgan'),  
56 ('Hamedan'),  
57 ('Urmia'),  
58 ('Kerman'),  
59 ('Bandar Abbas'),  
60 ('Ardabil'),  
61 ('Qazvin'),  
62 ('Bushehr'),  
63 ('Arak'),  
64 ('Abadan');
```

جدول **category**: (برای کتگوری های بخش املاک)

```
66 • create table divarDB.category(  
67     id int not null auto_increment primary key,  
68     name varchar(45) not null  
69  
70 )ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;  
71  
72 • INSERT INTO divarDB.category(name)  
73 VALUES ('Aparteman'),  
74 ('Khane, vila'),  
75 ('Zamin kolangi'),  
76 ('Daftare kar, otaghe edari, matab'),  
77 ('Maghaze, ghorfe'),  
78 ('Sanati, keshavarzi, edari');
```

جدول **ad\_type**: (برای انتخاب نوع آگهی دهنده)

```
110 • create table divarDB.ad_type(  
111     id int not null auto_increment primary key,  
112     name varchar(45) not null  
113  
114 ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;  
115  
116 • INSERT INTO divarDB.ad_type (name)  
117 VALUES ('moshaverane amlak'),  
118 ('shakhsi');
```



جدول **sector**: (برای پیاده سازی منطقه ها، حاوی اسم منطقه و آیدی شهر)

- ```
create table divarDB.sector(  
    id int not null auto_increment primary key,  
    name varchar(45) not null,  
    city_id int ,  
    FOREIGN KEY (city_id) REFERENCES city(id)  
  
)ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```
- ```
INSERT INTO divarDB.sector(name, city_id)  
VALUES ('Keshavarz boulevard',2),  
('Ekbatan',2),  
('Narmak',2),  
('Tajrish',2),  
('Sohrevardi',2),  
('Pasdaran',2),  
('Saadat Abad',2),  
('Elahie',2),  
('Shahrak gharb',2),  
('Tehranpars',2),  
('Sajjad boulevard',7),  
('Ahmad Abad St.',7),  
('Hashemie',7),  
('Khayyam boulevard',7),  
('Maryam Abad',1),  
('Motahhari st.',1),  
('Astane',4),  
('Eshagh Beyg',4),  
('Sar bagh',4),  
('Jolfa',8);
```

## جدول advertisement:

```
● ○ create table divarDB.advertisement(  
    id int not null auto_increment primary key,  
    is_instantaneous boolean not null,  
    has_price boolean not null,  
    price int ,  
    number_of_pictures int not null,  
    image blob ,  
    description text ,  
    user_id int ,  
    sector_id int,  
    is_expired boolean ,  
    expired_date timestamp,  
    ad_type_id int,  
    FOREIGN KEY (sector_id) REFERENCES sector(id),  
    FOREIGN KEY (user_id) REFERENCES user(id),  
    FOREIGN KEY (ad_type_id) REFERENCES ad_type(id)  
)  
ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

این جدول حاوی آگهی هاست.

از `boolean` ای به نام `is_instantaneous` برای مشخص کردن اینکه آگهی فوری است یا نه استفاده شده است. در `number_of_pictures` تعداد عکس های هر تبلیغ درج میشود. در صورتی که تعداد عکس ها برابر با صفر باشد، درمیابیم که آگهی عکس ندارد. برای قسمت توضیحات `description` در نظر گرفته شده است. از `boolean` ای به نام `is_expired` برای مشخص کردن اینکه آگهی منقضی شده است یا نه استفاده شده است در صورت منقضی شدن، `expired_date` تاریخ آن را دربردارد. در `ad_type_id` هم، نوع آگهی دهنده مشخص میشود.

به این ترتیب تعدادی رکورد در این جدول درج کردیم:

```
INSERT INTO divarDB.advertisement (number_of_picture, is_instantaneous, description,
has_price, price, user_ID, sector_ID, is_expired, expired_date, add_type_id, is_requested)
VALUES
(0, true, 'XloQKgxTBXoA0xvRf6kB', true, 183156177, 1, 1, false, null, 1,false),
(5, true, 'tevKcaU00yPvrwSMGQvX', true, 19114817, 6, 1, true, '2008-01-01 00:00:01', 2,false),
(0, false, 'NdpfdfXrhK', true, 832381, 2, 2, false, null, 1,false),
(1, false, 'TRjQVLefvR', true, 3267790, 5, 3, true, '1999-01-01 00:00:01', 1,false),
(5, true, 'OdXULgpjnU', true, 344376138, 3, 4, false, null, 2,false),
(0, false, 'VGIU1aw5WQ7gD2bE6HDx', False, NULL, 12, 2, true, '2003-01-01 00:00:01', 2,false),
(0, false, 'RoSkWe4fWiGYq9aecYas', False, NULL, 4, 5, false, null, 2,false),
(3, true, 'wNHkbbD1aYh9uPbDh2Ip', true, 19114817, 13, 3, true, '2002-04-03 00:00:01', 1,false),
(0, false, 'qgWTqRORQu', true, 807276, 7, 4, false, null, 2,false),
(0, false, 'JE9DLYnwYd2JHvTAuCnR', False, NULL, 16, 6, true, '2000-05-01 00:00:01', 2,false),
(0, true, 'rzFZBJImjT', true, 17276, 14, 5, false, null, 1,false),
(4, false, '6XPYQSerDcckWt6yneOV', true, 183156177, 15, 7, true, '2020-01-01 00:00:01', 2,false),
(0, false, 'c9sqaQcE6AQL3CNKQKD', False, NULL, 18, 6, true, '2018-04-02 00:00:01', 1,false),
(0, false, 'fKMdzTkZok', False, NULL, 17, 8, false, null, 1,false),
(1, false, 'RnaJAFGwJi', true, 21671831, 23, 9, false, null, 1,false),
(6, true, 'UL03TJm1g9cGdBQRWa1G', true, 19114817, 21, 7, true, '2002-01-11 00:00:01', 1,false),
(0, true, '3M4y0Du9B5gAydVwudf1', False, NULL, 8, 10, false, null, 2,false),
(1, false, 'GJGgo7PQFiJRXAmV2zJo', False, NULL, 9, 11, true, '2008-04-01 00:00:01', 2,false),
(2, true, 'r30HvVSWeirIFYgVP2Km', true, 961525574, 22, 8, true, '2015-11-01 00:00:01', 1,false),
(4, false, 'hyWh2a3t2HT9XAVF23cI', true, 961525574, 20, 9, false, null, 2,false),
(0, true, 's1PVBbNktb', true, 35906125, 19, 12, true, '2016-01-01 00:00:01', 1,false),
(1, true, '0Kc14tMGzX8ihHjh2SeJ', true, 114843820, 10, 13, false, null, 2,false),
(0, false, '9XvouGKPJ6UqWROzgT0W', true, 1669901, 11, 10, false, null, 2,false),
(0, true, 'UCMrqWPKVi', true, 183156177, 1, 1, true, '2013-08-08 00:00:01', 2,false);
```

در ادامه جدول vehicle برای ماشین ها پیاده سازی شده است. که دو جدول car و heavy\_vehicles از آن ارث بری میکنند.



## :vehicle جدول

- ```
create table divarDB.vehicle(  
    id int not null auto_increment primary key,  
    year int not null,  
    sector varchar(80) not null,  
    car_operation int not null,  
    is_residential boolean not null,  
    is_exchange boolean not null,  
    is_on_sale boolean not null,  
    is_free boolean not null,  
    add_id int,  
    FOREIGN KEY (add_id) REFERENCES advertisement(id)  
  
)ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```
- ```
INSERT INTO divarDB.vehicle (year, car_operation, is_residential, add_id,  
is_exchange, is_on_sale, is_free, sector)  
VALUES (88, 42021, True, 1, true, true, false, 1),  
(1398, 14742, True, 2, true, true, false, 1),  
(1385, 128223, False, 3, false, true, false, 3),  
(1392, 154488, False, 4, false, false, false, 1),  
(1397, 27355, False, 5, true, true, false, 1),  
(1398, 125341, True, 6, false, false, false, 5),  
(1389, 121811, False, 7, true, false, false, 1),  
(1398, 1814, True, 17, false, false, false, 2),  
(1390, 28202, False, 8, true, false, false, 2),  
(1394, 127718, False, 9, false, false, false, 1),  
(1396, 17332, True, 10, true, false, false, 2),  
(1386, 113142, True, 11, false, false, false, 1),  
(1399, 31545, False, 12, true, false, false, 19),  
(1387, 112460, True, 13, false, false, false, 1),  
(1393, 45132, False, 14, false, false, false, 2),  
(1395, 181146, False, 15, false, false, false, 1),  
(1398, 148156, False, 16, true, false, false, 2),  
(1388, 187114, True, 17, false, false, false, 2),  
(1389, 108205, False, 18, true, true, false, 9),  
(1385, 147123, False, 19, false, true, false, 15),  
(1391, 120577, True, 20, true, true, false, 8);
```

## جدول car

- ```
create table divarDB.car(  
    brand varchar(80) not null,  
    vehicle_id int,  
    FOREIGN KEY (vehicle_id) REFERENCES vehicle(id)  
  
)ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```
- ```
INSERT INTO divarDB.car (brand, vehicle_id)  
VALUES ('Chevrolet', 1),  
('Saypa', 2),  
('Tesla', 3),  
('Kia', 4),  
('BMW', 5),  
('Lexus', 6),  
('Honda', 7),  
('Porsche', 8),  
('Hyundai', 10),  
('Toyota', 11),  
('Nissan', 13),  
('Cadillac', 15),  
('Mazda', 16),  
('Ford', 19),  
('Renault', 20);
```

## جدول heavy\_vehicle

- ```
create table divarDB.heavy_vehicle(  
    vehicle_id int,  
    FOREIGN KEY (vehicle_id) REFERENCES vehicle(id)  
  
)ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```
- ```
INSERT INTO divarDB.heavy_vehicle (vehicle_id)  
VALUES (9),  
(12),  
(14),  
(17),  
(18);
```

```

create table divarDB.estate(
  id int not null auto_increment primary key,
  area double not null,
  year_of_construction int not null,
  number_of_rooms int not null,
  location text,
  category_ID int,
  has_floor boolean,
  has_parking boolean,
  has_warehouse boolean,
  ad_ID int,
  FOREIGN KEY (ad_id) REFERENCES advertisement(id),
  FOREIGN KEY (category_id) REFERENCES category(id)

)ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

INSERT INTO divarDB.estate (area, year_of_construction, number_of_rooms, location,
category_ID, ad_ID, has_floor, has_parking, has_warehouse)
VALUES (225, 1390, 3, 'dKATGLgUrK', 1, 21,false, false, false),
(183, 1396, 2, 'AgTbQfyZSh', 3, 22, false, false, false),
(300, 1357, 2, 'BKfucXuful', 4, 23, false, false, false),
(95, 1366, 1, 'IesuBeYpkA', 4, 25, false, false, false),
(270, 1367, 4, 'wOjkDigtCI', 1, 24, false, false, false),
(146, 1390, 5, 'dLpATYFFtm', 2, 26, false, false, false),
(109, 1369, 3, 'fbEkWptvlo', 3, 29, false, false, false),
(321, 1340, 2, 'rrnDptbZRz', 5, 30, true, true, true),
(221, 1377, 5, 'vpmSUiYLAG', 2, 27, false, false, false),
(153, 1384, 2, 'BTjrRtObse', 1, 28, false, false, false),
(213, 1369, 3, 'HjyftFmVqX', 2, 40, false, true, true),
(333, 3147, 5, 'JPJhiAWPhz', 2, 31, true, true, true),
(393, 1387, 6, 'wIXegDtjKI', 6, 35, false, false, true),
(313, 1393, 4, 'e1ZbBZmdmA', 5, 37, true, true, true),
(232, 1392, 3, 'kkzcOJtECh', 2, 36, true, true, false),
(168, 1363, 1, 'jWQGnVDGqz', 3, 39, false, false, false),
(80, 1398, 1, 'KnHRuGsePy', 2, 38, true, true, true),
(172, 1355, 4, 'ImMFMZFVtL', 3, 33, false, true, true),
(327, 1381, 6, 'UQQJc1wJET', 2, 34, true, true, true),
(310, 1371, 3, 'SpPDWeXeRZ', 3, 32, false, false, false);

```

### جدول **estate\_official** (املاک اداری- تجاری)

- ```
create table divarDB.estate_official(  
    has_document boolean not null,  
    is_rental boolean not null,  
    estate_ID int,  
    FOREIGN KEY (estate_id) REFERENCES estate(id)  
  
)ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```
- ```
INSERT INTO divarDB.estate_official (estate_ID , is_rental, has_document)  
VALUES (1, true, true),  
(2, false, false),  
(3, true, true),  
(4, false, true),  
(5, true, true),  
(6, true, false),  
(7, false, false);
```

### جدول **estate\_sale** (خرید مسکونی)

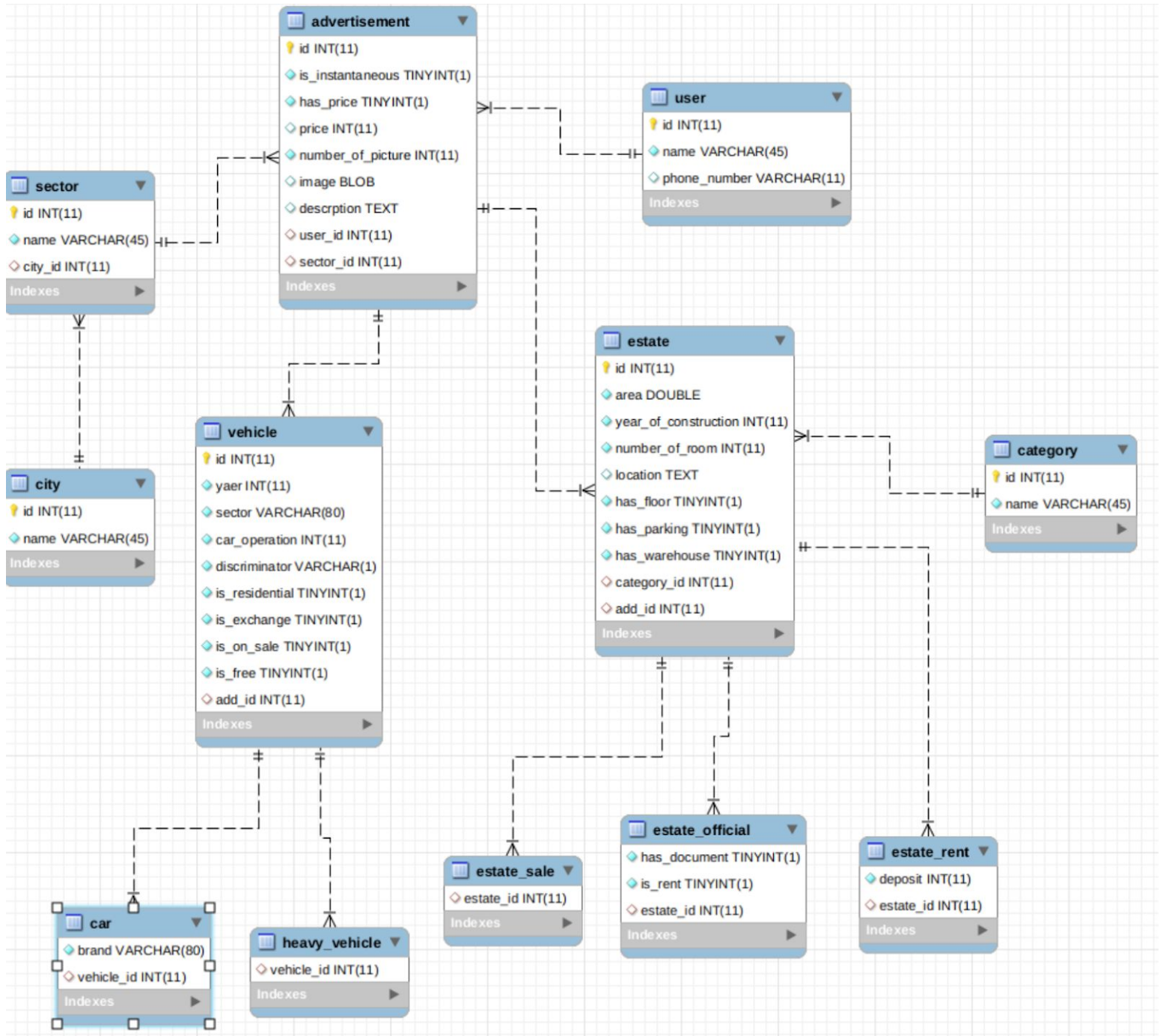
- ```
create table divarDB.estate_sale(  
  
    estate_id int,  
    FOREIGN KEY (estate_id) REFERENCES estate(id)  
  
)ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```
- ```
INSERT INTO divarDB.estate_sale (estate_id)  
VALUES (15),  
(16),  
(17),  
(18),  
(19),  
(20);
```



## جدول `estate_rent` (اجاره مسکونی)

- ```
create table divarDB.estate_rent(  
    deposit int not null,  
    estate_id int,  
    FOREIGN KEY (estate_id) REFERENCES estate(id)  
  
)ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```
- ```
INSERT INTO divarDB.estate_rent (estate_id, deposit)  
VALUES (8, 58726),  
(9, 131362),  
(10, 157164),  
(11, 36616),  
(12, 128229),  
(13, 167327),  
(14, 57735);
```

نمودار داده یا Data Diagram را نمایش دادیم:



پرسمان ها به صورت **stored procedure** :

الف) خودرو

DELIMITER //

```
CREATE PROCEDURE carYearSR()
BEGIN
select v.* , a.* , c.name as 'city name' from vehicle v
left join advertisement a on v.add_id =a.id
left join sector s on s.id = a.sector_id
left join city c on s.city_id = c.id
where v.yaer between 1390 and 1397 and (v.is_residential = true or
v.is_on_sale = true);
END //
```

DELIMITER ;

DELIMITER //

```
CREATE PROCEDURE carBrand(a int , b int)
BEGIN
select ca.brand from car ca
left join vehicle v on ca.vehicle_id =v.id
left join advertisement a on v.add_id =a.id
where a.number_of_picture > 0 and v.car_operation between a and b;
END //
```

DELIMITER ;

DELIMITER //

```
CREATE PROCEDURE delCarRegPr()
BEGIN
delete a,v,ca from advertisement a
left join vehicle v on a.id =v.add_id
left join car ca on ca.vehicle_id =a.id
left join sector s on s.id = a.sector_id
left join city c on s.city_id = c.id
where c.name = 'ekbatan' and a.has_price = false;
END //
```

DELIMITER ;



DELIMITER //

```
CREATE PROCEDURE carRegUrgent()
BEGIN
select v.* , a.* , c.name as 'city name' from vehicle v
left join advertisement a on v.add_id =a.id
left join sector s on s.id = a.sector_id
left join city c on s.city_id = c.id
where a.is_instantaneous = true and a.sector_id not in (
select s.id from sector s
left join city c on s.city_id = c.id
where c.name ="Tehran" and s.name = "Keshavarz boulevard"
);
END //
```

DELIMITER ;

DELIMITER //

```
CREATE PROCEDURE updCarRegImg()
BEGIN
update heavy_vehicle hv
left join vehicle v on hv.vehicle_id=v.id
```

```
left join advertisement a on v.add_id =a.id
left join sector s on s.id = a.sector_id
left join city c on s.city_id = c.id
set
a.number_of_picture =0,
a.sector_id = (
  select s.id from sector s
  left join city c on s.city_id = c.id
  where c.name ="Tehran" and s.name = "Chitgar"
)
where
v.is_residential = true and
a.number_of_picture >0 and
a.sector_id in (
  select s.id from sector s
  left join city c on s.city_id = c.id
  where c.name ="tehran" and s.name = "aghdasie"
);
END //
```

DELIMITER ;

DELIMITER //

```
CREATE PROCEDURE minFuncTiba()
BEGIN
select min(v.car_operation) from car ca
left join vehicle v on ca.vehicle_id =v.id
left join advertisement a on v.add_id =a.id
where v.is_exchange = false and v.is_free = false
group by v.car_operation;
END //
```

DELIMITER ;

DELIMITER //

```
CREATE PROCEDURE maxCarPr(x varchar(45))
BEGIN
select max(a.price) from car ca
left join vehicle v on ca.vehicle_id =v.id
left join advertisement a on v.add_id =a.id
where ca.brand != x and a.is_instantaneous = false
group by a.price;
END //
```

DELIMITER ;

DELIMITER //

```
CREATE PROCEDURE carCityPr()
BEGIN
select ca.*,v.*,a.* from car ca
left join vehicle v on ca.vehicle_id =v.id
left join advertisement a on v.add_id =a.id
left join sector s on s.id = a.sector_id
left join city c on s.city_id = c.id
where a.is_requested = true and a.has_price = true and
a.price between 10000000 and 40000000 and c.name != 'Yazd' ;
END //
```

DELIMITER ;



DELIMITER //

```
CREATE PROCEDURE carReplacement()
BEGIN
update heavy_vehicle hv
left join vehicle v on hv.vehicle_id =v.id
left join advertisement a on v.add_id =a.id
left join sector s on s.id = a.sector_id
left join city c on s.city_id = c.id
set
v.is_requested = false,
v.is_on_sale = true
where v.is_requested = true and v.is_free = true ;
END //
```

DELIMITER ;

DELIMITER //

```
CREATE PROCEDURE GetAllProducts()
BEGIN
  SELECT * FROM products;
END //
```

DELIMITER ;

DELIMITER //

```
CREATE PROCEDURE minPrEstate()
BEGIN
  SELECT min(a.price) from estate e
  left join advertisement a on e.add_id=a.id
  where e.area <200;
END //
```

DELIMITER ;

DELIMITER //

```
CREATE PROCEDURE numEstateArea()
BEGIN
  select count(e.id) from estate e
  left join advertisement a on e.add_id=a.id
  left join sector s on a.sector_id =s.id
  where s.name = 'Arzhantin' and e.area < 200;
END //
```

DELIMITER ;

DELIMITER //

```
CREATE PROCEDURE delEstatePr()
BEGIN
    delete eo , a,er,es , e from estate e
    left join advertisement a on e.add_id=a.id
    left join estate_official eo on eo.estate_id=e.id
    left join estate_rent er on er.estate_id=e.id
    left join estate_sale es on es.estate_id=e.id
    left join category cat on e.category_id =cat.id
    left join add_type aty on a.add_type_id =aty.id
    where cat.name = 'Zamin kolangi' and
    aty.name= 'moshavere amlak';
END //
```

DELIMITER ;

DELIMITER //

```
CREATE PROCEDURE rentalEstate()
BEGIN
    select e.* , es.* , a.* from estate_rent es
    left join estate e on e.id = es.estate_id
    left join advertisement a on e.add_id=a.id
    where a.is_instantaneous= false and a.number_of_picture > 0 and
    es.deposit <x and a.price <y;
END //
```

DELIMITER ;

DELIMITER //

```
CREATE PROCEDURE numStore()
BEGIN
select count(eo.estate_id) from estate_official eo
left join estate e on e.id = eo.estate_id
left join advertisement a on e.add_id=a.id
where a.is_requested = true and eo.has_document = false;
END //
```

DELIMITER ;

DELIMITER //

```
CREATE PROCEDURE avgEstate(n int)
BEGIN
select avg(e.area) from estate_official eo
left join estate e on e.id = eo.estate_id
left join advertisement a on e.add_id=a.id
where a.number_of_picture > 0 and e.number_of_room > n;
END //
```

DELIMITER ;

DELIMITER //

```
CREATE PROCEDURE villaArea()
BEGIN
select e.* from estate e
left join advertisement a on e.add_id=a.id
where e.area > 500 and a.add_type_id = 2;
END //
```

DELIMITER ;

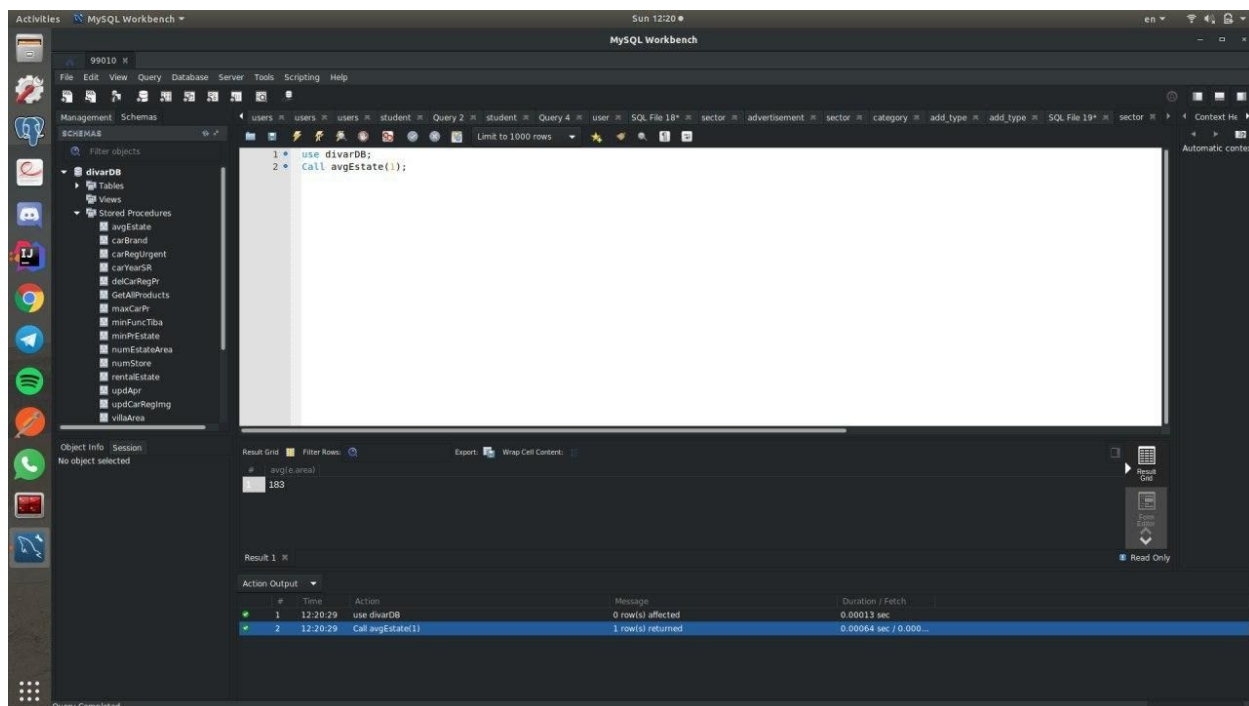
DELIMITER //

```
CREATE PROCEDURE updApr()
BEGIN
update estate e
left join advertisement a on e.add_id=a.id
left join category cat on e.category_id=cat.id
set a.is_instantaneous = true , a.price = null
where cat.name = 'Aparteman' and a.has_price = false and
a.is_instantaneous=false;
```

END //

DELIMITER ;

تصاویری از خروجی ها:



MySQL Workbench

1 use divarDB;  
2 Call carBrand(0.99999);

Result Grid

#	brand
1	Satya
2	BMW
3	Nissan

Action Output

#	Time	Action	Message	Duration / Fetch
10	12:22:46	Use carBrand(0.99999)	3 row(s) returned	0.00042 sec / 0.000...
11	12:22:35	use divarDB	0 row(s) affected	0.00012 sec
12	12:22:35	Call carBrand(0.999)	0 row(s) returned	0.00028 sec / 0.000...
13	12:22:40	use divarDB	0 row(s) affected	0.00013 sec
14	12:22:40	Call carBrand(0.9999)	0 row(s) returned	0.00035 sec / 0.000...
15	12:22:46	use divarDB	0 row(s) affected	0.00011 sec
16	12:22:46	Call carBrand(0.99999)	3 row(s) returned	0.00030 sec / 0.000...

Query Completed

MySQL Workbench

1 use  
2 Call carBrand(0.99999);

Result Grid

advental	is_exchange	is_on_sale	is_free	add_id	is_instantaneous	has_price	price	number_of_picture	image	description	user_id	sector_id	is_expired	expired_date	add_type_id	is_requested	city name
1	1	0	5	5	1	1	344376138	5	...	OdxULgppu	3	4	0	2020-06-21 03:07:43	2	0	Tehran
1	0	0	8	8	1	1	19114817	3	...	wNHk6dlayY9aUP8Ch2ip	13	3	1	2002-04-03 00:00:01	1	0	Tehran
0	0	0	11	11	1	1	17276	0	...	rZFZB3mYT	14	5	0	2020-06-21 03:07:43	1	0	Tehran
1	0	0	16	16	1	1	19114817	6	...	UL03T3Mg8cGd8QRWw1G	21	7	1	2002-01-11 00:00:01	1	0	Tehran
0	0	0	17	17	1	0	...	0	...	3M4yODu8B5gAydVwudfl	8	10	0	2020-06-21 03:07:43	2	0	Tehran
0	0	0	17	17	1	0	...	0	...	3M4yODu8B5gAydVwudfl	8	10	0	2020-06-21 03:07:43	2	0	Tehran
0	1	0	19	19	1	1	961529574	2	...	r3OHVVSwerIFyGVP2Km	22	8	1	2015-11-01 00:00:01	1	0	Tehran

Action Output

#	Time	Action	Message	Duration / Fetch
12	12:22:35	Use carBrand(0.9999)	0 row(s) returned	0.00012 sec
13	12:22:40	use divarDB	0 row(s) affected	0.00013 sec
14	12:22:40	Call carBrand(0.9999)	0 row(s) returned	0.00035 sec / 0.000...
15	12:22:46	use divarDB	0 row(s) affected	0.00011 sec
16	12:22:46	Call carBrand(0.99999)	3 row(s) returned	0.00030 sec / 0.000...
17	12:23:08	use divarDB	0 row(s) affected	0.00015 sec
18	12:23:08	Call carRegurgent()	7 row(s) returned	0.00072 sec / 0.000...

Query Completed



MySQL Workbench

```

1 use divarDB;
2 call carYearSR();
3

```

id	year	secto	car_operation	is_residential	is_exchange	is_on_sale	is_free	add_k	id	is_instantaneous	has_price	price	number_of_picture	image	description	user_id	sector_id	is_expired	expired_date
5	1397	1	27355	0	1	1	0	5	5	1	1	344376138	5	---	OdKULggrU	3	4	0	2020-06-21 03:07:4
11	1396	2	17332	1	1	0	0	10	10	0	0	---	0	---	JE9QLYrwYd2JhTAvCrR	16	6	1	2020-06-01 00:00:0
21	1391	6	120577	1	1	1	0	20	20	0	1	961525574	4	---	hyWb2a3CH1T9KAVF23d	20	9	0	2020-06-21 03:07:4

Result 8

#	Time	Action	Message	Duration / Fetch
18	12:23:08	Use carRegurgent/	0 row(s) returned	0.00072 sec / 0.0000...
19	12:24:19	use divarDB	0 row(s) affected	0.00011 sec
20	12:24:19	Call carYearSR()	Error Code: 1054. Unknown column 'v.yaar' in 'where ...	0.00035 sec
21	12:25:17	DROP PROCEDURE 'divarDB'. 'carYearSR'	0 row(s) affected	0.00066 sec
22	12:25:23	CREATE DEFINER='alshrf'@'localhost' PROCEDURE 'carYear...	0 row(s) affected	0.00035 sec
23	12:25:31	use divarDB	0 row(s) affected	0.00013 sec
24	12:25:31	Call carYearSR()	3 row(s) returned	0.00069 sec / 0.000...

Query Completed

MySQL Workbench

```

1 use divarDB;
2 call delCarRegPr();
3

```

#	Time	Action	Message	Duration / Fetch
20	12:24:19	Use carYearSR()	Error Code: 1054. Unknown column 'v.yaar' in 'where ...	0.00035 sec
21	12:25:17	DROP PROCEDURE 'divarDB'. 'carYearSR'	0 row(s) affected	0.00066 sec
22	12:25:23	CREATE DEFINER='alshrf'@'localhost' PROCEDURE 'carYear...	0 row(s) affected	0.00035 sec
23	12:25:31	use divarDB	0 row(s) affected	0.00013 sec
24	12:25:31	Call carYearSR()	3 row(s) returned	0.00069 sec / 0.000...
25	12:26:11	use divarDB	0 row(s) affected	0.00011 sec
26	12:26:11	Call delCarRegPr()	0 row(s) affected	0.00042 sec

Query Completed

MySQL Workbench

File Edit View Query Database Server Tools Scripting Help

Management Schemas

Filter objects

Views

Stored Procedures

avgEstate

carBrand

carRegUrgent

carYearSR

delCarRegPr

getAlProducts

maxCarPr

minFuncTiba

minPEstate

numEstateArea

numStore

rentalEstate

updApr

updCarReging

villaArea

Functions

sys

Object Info Session

Procedure: maxCarPr

```
1 use divarDB;
2 call maxCarPr('Benz');
```

Result Grid

maxCarPr

183156177

Action Output

#	Time	Action	Message	Duration / Fetch
31	12:28:13	USE divarDB	0 row(s) affected	0.00013 sec
32	12:28:13	CALL maxCarPr('Benz')	6 row(s) returned	0.00060 sec / 0.000...
33	12:29:01	DROP PROCEDURE 'divarDB'."maxCarPr"	0 row(s) affected	0.00064 sec
34	12:29:07	CREATE DEFINER='alshrf'@'localhost' PROCEDURE 'maxCarPr'...	Error Code: 1064. You have an error in your SQL synt...	0.00020 sec
35	12:29:22	CREATE DEFINER='alshrf'@'localhost' PROCEDURE 'maxCarPr'...	0 row(s) affected	0.00036 sec
36	12:29:45	USE divarDB	0 row(s) affected	0.00023 sec
37	12:29:45	CALL maxCarPr('Benz')	1 row(s) returned	0.0011 sec / 0.0000...

Query Completed

MySQL Workbench

File Edit View Query Database Server Tools Scripting Help

Management Schemas

Filter objects

Views

Stored Procedures

avgEstate

carBrand

carRegUrgent

carYearSR

delCarRegPr

getAlProducts

maxCarPr

minFuncTiba

minPEstate

numEstateArea

numStore

rentalEstate

updApr

updCarReging

villaArea

Functions

sys

Object Info Session

Procedure: maxCarPr

```
1 use divarDB;
2 call maxCarPr('Benz');
```

Result Grid

maxCarPr

183156177

Action Output

#	Time	Action	Message	Duration / Fetch
31	12:28:13	USE divarDB	0 row(s) affected	0.00013 sec
32	12:28:13	CALL maxCarPr('Benz')	6 row(s) returned	0.00060 sec / 0.000...
33	12:29:01	DROP PROCEDURE 'divarDB'."maxCarPr"	0 row(s) affected	0.00064 sec
34	12:29:07	CREATE DEFINER='alshrf'@'localhost' PROCEDURE 'maxCarPr'...	Error Code: 1064. You have an error in your SQL synt...	0.00020 sec
35	12:29:22	CREATE DEFINER='alshrf'@'localhost' PROCEDURE 'maxCarPr'...	0 row(s) affected	0.00036 sec
36	12:29:45	USE divarDB	0 row(s) affected	0.00023 sec
37	12:29:45	CALL maxCarPr('Benz')	1 row(s) returned	0.0011 sec / 0.0000...

Query Completed

MySQL Workbench interface showing a query execution. The query is:

```
1 use divarDB;
2 call minFuncTiba();
3
```

The result grid shows a single row with the value 1014.

The Action Output table shows the following actions:

#	Time	Action	Message	Duration / Fetch
37	12:29:43	Use max_car_price	1 row(s) returned	0.00043 sec / 0.000...
38	12:29:59	use divarDB	0 row(s) affected	0.00010 sec
39	12:29:59	Call minFuncTiba()	8 row(s) returned	0.00043 sec / 0.000...
40	12:30:23	DROP PROCEDURE 'divarDB'.minFuncTiba	0 row(s) affected	0.00032 sec
41	12:30:37	CREATE DEFINER='alshrf'@'localhost' PROCEDURE 'minFun...	0 row(s) affected	0.00025 sec
42	12:30:46	use divarDB	0 row(s) affected	0.00015 sec
43	12:30:46	Call minFuncTiba()	1 row(s) returned	0.00048 sec / 0.000...

MySQL Workbench interface showing a query execution. The query is:

```
1 use divarDB;
2 call minPreEstate();
3
```

The result grid shows a single row with the value 632381.

The Action Output table shows the following actions:

#	Time	Action	Message	Duration / Fetch
39	12:29:39	Call minFuncTiba()	8 row(s) returned	0.00043 sec / 0.000...
40	12:30:23	DROP PROCEDURE 'divarDB'.minFuncTiba	0 row(s) affected	0.00032 sec
41	12:30:37	CREATE DEFINER='alshrf'@'localhost' PROCEDURE 'minFun...	0 row(s) affected	0.00025 sec
42	12:30:46	use divarDB	0 row(s) affected	0.00015 sec
43	12:30:46	Call minFuncTiba()	1 row(s) returned	0.00048 sec / 0.000...
44	12:31:02	use divarDB	0 row(s) affected	0.00010 sec
45	12:31:02	Call minPreEstate()	1 row(s) returned	0.00034 sec / 0.000...

MySQL Workbench

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Management Schemas

Filter objects

Views

Stored Procedures

avgEstate

carBrand

carRegUrgent

carYearSR

getCarRegPr

getAlProducts

maxCarPr

minFuncTba

minPEstate

numEstateArea

numStore

rentalEstate

updApr

updCarReging

vilaArea

Functions

sys

Object Info Session

Procedure: numEstateArea

1 2 3

Execute the selected portion of the script or everything, if there is no selection

Result Grid

Filter Rows

Export

Wrap Cell Content

# count(field)

0

Result 14

Action Output

#	Time	Action	Message	Duration / Fetch
41	12:30:37	USE DATABASE	U.00043 sec	
42	12:30:46	use divarDB	0 row(s) affected	0.00018 sec
43	12:30:46	Call minFuncTba()	1 row(s) returned	0.00048 sec / 0.000...
44	12:31:02	use divarDB	0 row(s) affected	0.00010 sec
45	12:31:02	Call minPEstate()	1 row(s) returned	0.00034 sec / 0.000...
46	12:31:15	use divarDB	0 row(s) affected	0.00012 sec
47	12:31:15	Call numEstateArea()	1 row(s) returned	0.00037 sec / 0.000...

Query Completed

MySQL Workbench

File Edit View Query Database Server Tools Scripting Help

Management Schemas

Filter objects

Views

Stored Procedures

avgEstate

carBrand

carRegUrgent

carYearSR

getCarRegPr

getAlProducts

maxCarPr

minFuncTba

minPEstate

numEstateArea

numStore

rentalEstate

updApr

updCarReging

vilaArea

Functions

sys

Object Info Session

Procedure: numStore

1 2 3

use divarDB;

Call numStore();

Result Grid

Filter Rows

Export

Wrap Cell Content

# count(eo.estate\_id)

0

Result 15

Action Output

#	Time	Action	Message	Duration / Fetch
43	12:30:46	Call minFuncTba()	1 row(s) returned	U.00048 sec / U.000...
44	12:31:02	use divarDB	0 row(s) affected	0.00010 sec
45	12:31:02	Call minPEstate()	1 row(s) returned	0.00034 sec / 0.000...
46	12:31:15	use divarDB	0 row(s) affected	0.00012 sec
47	12:31:15	Call numEstateArea()	1 row(s) returned	0.00037 sec / 0.000...
48	12:31:35	use divarDB	0 row(s) affected	0.00010 sec
49	12:31:35	Call numStore()	1 row(s) returned	0.00045 sec / 0.000...

Query Completed

MySQL Workbench

1. use divarDB;  
2. Call rentalEstate(99999,999999);  
3.

Result Grid

#	id	area	year_of_construction	number_of_rooms	location	has_floor	has_parking	has_warehouse	category_id	add_k	deposit	estate_id	id	is_instantaneous	has_price	price	number_of_picture	image	description
---	----	------	----------------------	-----------------	----------	-----------	-------------	---------------	-------------	-------	---------	-----------	----	------------------	-----------	-------	-------------------	-------	-------------

Action Output

#	Time	Action	Message	Duration / Fetch
51	12:32:49	USE DATABASE divarDB	U 0.00004 sec	
52	12:32:38	DROP PROCEDURE divarDB.rentalEstate	0 row(s) affected	0.00039 sec
53	12:32:44	CREATE DEFINER='alshrf'@'localhost' PROCEDURE rentalEState	0 row(s) affected	0.00034 sec
54	12:33:23	use divarDB	0 row(s) affected	0.00013 sec
55	12:33:23	Call rentalEstate(99999,99999)	0 row(s) returned	0.00065 sec / 0.000...
56	12:33:31	use divarDB	0 row(s) affected	0.00014 sec
57	12:33:31	Call rentalEstate(99999,999999)	0 row(s) returned	0.00039 sec / 0.000...

Query Completed

MySQL Workbench

1. use divarDB;  
2. Call updtApr();  
3.

Action Output

#	Time	Action	Message	Duration / Fetch
52	12:32:44	CREATE DEFINER='alshrf'@'localhost' PROCEDURE rentalEState	U 0.00004 sec	
54	12:33:23	use divarDB	0 row(s) affected	0.00013 sec
55	12:33:23	Call rentalEstate(99999,99999)	0 row(s) returned	0.00065 sec / 0.000...
56	12:33:31	use divarDB	0 row(s) affected	0.00014 sec
57	12:33:31	Call rentalEstate(99999,999999)	0 row(s) returned	0.00039 sec / 0.000...
58	12:33:58	use divarDB	0 row(s) affected	0.00010 sec
59	12:33:58	Call updtApr()	0 row(s) affected	0.00056 sec

Query Completed

MySQL Workbench

1. use divarDB;  
2. Call upCarRegIng();

Action Output

#	Time	Action	Message	Duration / Fetch
55	12:33:23	Call rentalState(9999,9999)	0 row(s) returned	0.00003 sec / 0.000...
56	12:33:31	use divarDB	0 row(s) affected	0.00014 sec
57	12:33:31	Call rentalState(99999,999999)	0 row(s) returned	0.00039 sec / 0.000...
58	12:33:38	use divarDB	0 row(s) affected	0.00010 sec
59	12:33:38	Call upAgr()	0 row(s) affected	0.00056 sec
60	12:34:12	use divarDB	0 row(s) affected	0.00014 sec
61	12:34:12	Call upCarRegIng()	0 row(s) affected	0.00076 sec

Query Completed

MySQL Workbench

1. use divarDB;  
2. Call villaArea();

Result Grid

#	id	area	year_of_construction	number_of_rooms	location	has_floor	has_parking	has_warehouse	category_id	add_k
61	12:34:12	use divarDB	0 row(s) affected	0.00014 sec						
62	12:34:12	Call upCarRegIng()	0 row(s) affected	0.00076 sec						
63	12:34:48	use divarDB	0 row(s) affected	0.00012 sec						
64	12:35:05	Call villaArea()	Error Code: 1305. PROCEDURE divarDB.villaArea does ...	0.00014 sec						
65	12:35:05	use divarDB	0 row(s) affected	0.00017 sec						
66	12:35:05	Call villaArea()	0 row(s) returned	0.00045 sec / 0.000...						

Action Output

#	Time	Action	Message	Duration / Fetch
59	12:33:38	Call upAgr()	0 row(s) affected	0.00056 sec
60	12:34:12	use divarDB	0 row(s) affected	0.00014 sec
61	12:34:12	Call upCarRegIng()	0 row(s) affected	0.00076 sec
62	12:34:48	use divarDB	0 row(s) affected	0.00012 sec
63	12:34:48	Call villaArea()	Error Code: 1305. PROCEDURE divarDB.villaArea does ...	0.00014 sec
64	12:35:05	use divarDB	0 row(s) affected	0.00017 sec
65	12:35:05	Call villaArea()	0 row(s) returned	0.00045 sec / 0.000...

Query Completed