

ФИНАЛЬНОЕ 10 ДОМАШНЕЕ ЗАДАНИЕ. ПРОЕКТИРОВАНИЕ БАЗЫ ДАННЫХ.

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Используем схему

Client

clientNo	cName
CR76	John Kay
CR56	Aline Stewart

Rental

clientNo	propertyNo	rentStart	rentFinish
CR76	PG4	1-Jul-12	31-Aug-13
CR76	PG16	1-Sep-13	1-Sep-14
CR56	PG4	1-Sep-11	10-Jun-12
CR56	PG36	10-Oct-12	1-Dec-13
CR56	PG16	1-Nov-14	10-Aug-15

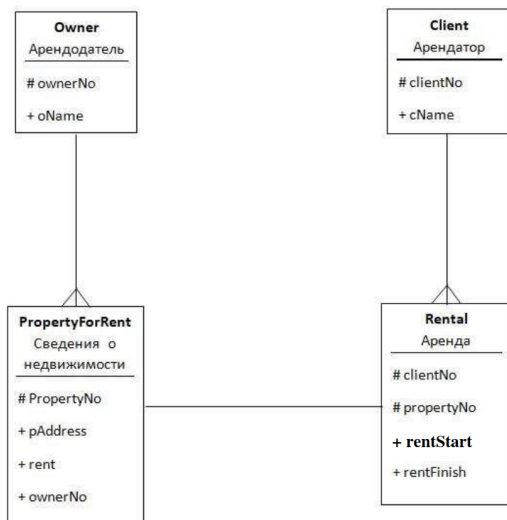
PropertyForRent

propertyNo	pAddress	rent	ownerNo
PG4	6 Lawrence St, Glasgow	350	CO40
PG16	5 Novar Dr, Glasgow	450	CO93
PG36	2 Manor Rd, Glasgow	375	CO93

Owner

ownerNo	oName
CO40	Tina Murphy
CO93	Tony Shaw

— + Автоматически
Диаграмма базы данных ClientRental (Аренда недвижимости)



Создаем базу данных и заходим в неё

```

sudo -i -u postgres
create database client_rental;
psql -d demo -U postgres
    
```

Создаем независимые таблицы базы данных

Сначала для клиента

```
CREATE TABLE Client
```

```
client_rental-# ( clientNo text PRIMARY KEY, cName CHARACTER VARYING(30));
```

```
INSERT INTO Client VALUES (CR76, John Kay);
INSERT INTO Client VALUES ('CR56', 'Aline Stewart');
```

Потом для хозяина

```
CREATE TABLE Owner
(ownerNo text PRIMARY KEY,      oName CHARACTER VARYING(30));
INSERT INTO Owner VALUES ('CO40', 'Tina Murphy');
INSERT INTO Owner VALUES ('CO93', 'Tony Shaw');
```

Создадим таблицу PropertyForRent , где используются уже добавленные ранее данные:

```
CREATE TABLE PropertyForRent (
propertyNo text,
pAddress text,
rent integer,
PRIMARY KEY (propertyNo),
ownerno text,
FOREIGN KEY (ownerno) REFERENCES Owner (ownerNo)
ON DELETE CASCADE
ON UPDATE CASCADE
);
```

Добавим данные:

```
INSERT INTO PropertyForRent VALUES ('PG4','6 Lawrence
St,Glasgow',350,'CO40');
INSERT INTO PropertyForRent VALUES ('PG16','5 Novar
Dr,Glasgow',450,'CO93');
INSERT INTO PropertyForRent VALUES ('PG36','2 Manor
Rd,Glasgow',375,'CO93');
```

```
client_rental=# CREATE TABLE PropertyForRent (
client_rental(# propertyNo text,
client_rental(# pAddress text,
client_rental(# rent integer,
client_rental(# PRIMARY KEY (propertyNo),
client_rental(# ownerno text,
client_rental(# FOREIGN KEY (ownerno) REFERENCES Owner (ownerNo)
client_rental(# ON DELETE CASCADE
client_rental(# ON UPDATE CASCADE
client_rental(# );
CREATE TABLE
client_rental=# INSERT INTO PropertyForRent VALUES ('PG4','6 Lawrence
client_rental'# St,Glasgow',350,'CO40');
INSERT 0 1
client_rental=# INSERT INTO PropertyForRent VALUES ('PG16','5 Novar
client_rental'# Dr,Glasgow',450,'CO93');
INSERT 0 1
```

Создадим таблицу Rental и добавим в неё данные

```
CREATE TABLE Rental (
clientNo text,
propertyNo text,
rentStart date,
```

```
rentFinish date,  
FOREIGN KEY (clientNo) REFERENCES Client (clientNo) ON DELETE CASCADE  
ON UPDATE CASCADE,  
FOREIGN KEY (propertyNo) REFERENCES PropertyForRent (propertyNo) ON DELETE  
CASCADE  
ON UPDATE CASCADE  
);  
SET datestyle TO DMY;
```

```
client_rental=# CREATE TABLE Rental (  
client_rental(# clientNo text,  
client_rental(# propertyNo text,  
client_rental(# rentStart date,  
client_rental(# rentFinish date,  
client_rental(# FOREIGN KEY (clientNo) REFERENCES Client (clientNo) ON DELETE CASCADE  
client_rental(# ON UPDATE CASCADE,  
client_rental(# FOREIGN KEY (propertyNo) REFERENCES PropertyForRent (propertyNo) ON DELETE CASCADE  
client_rental(# ON UPDATE CASCADE  
client_rental(# );  
CREATE TABLE  
client_rental=# SET datestyle TO DMY;  
SET
```

```
INSERT INTO Rental VALUES ('CR76','PG4','1-07-2012','31-08-2013');
```

```
INSERT INTO Rental VALUES ('CR76','PG4','1-07-2012','31-08-2013');
```

```
INSERT INTO Rental VALUES ('CR76','PG16','1-09-2013','1-09-2014');
```

```
INSERT INTO Rental VALUES ('CR56','PG4','1-09-2011','10-06-2012');
```

```
INSERT INTO Rental VALUES ('CR56','PG36','10-10-2012','1-12-2013');
```

```
INSERT INTO Rental VALUES ('CR56','PG16','1-11-2014','10-08-2015');
```

У нас получилось:

```
client_rental=# SELECT * FROM Rental;
 clientno | propertyno | rentstart | rentfinish
-----+-----+-----+-----
CR76     | PG4        | 2012-07-01 | 2013-08-31
CR76     | PG16       | 2013-09-01 | 2014-09-01
CR56     | PG4        | 2011-09-01 | 2012-06-10
CR56     | PG16       | 2014-11-01 | 2015-08-10
(4 rows)
```

```
client_rental=# SELECT * FROM PropertyForRent;
 propertyno | address | rent | ownerno
-----+-----+-----+-----
PG4         | 6 Lawrence+ | 350 | C040
            | St,Glasgow |     |
PG16        | 5 Novar  + | 450 | C093
            | Dr,Glasgow |     |
(2 rows)
```

```
client_rental=# SELECT * FROM Owner;
 ownerno | oname
-----+-----
C040    | Tina Murphy
C093    | Tony Shaw
(2 rows)
```

```
client_rental=# SELECT * FROM Client;
 clientno | cname
-----+-----
CR76     | John Kay
CR56     | Aline Stewart
(2 rows)
```