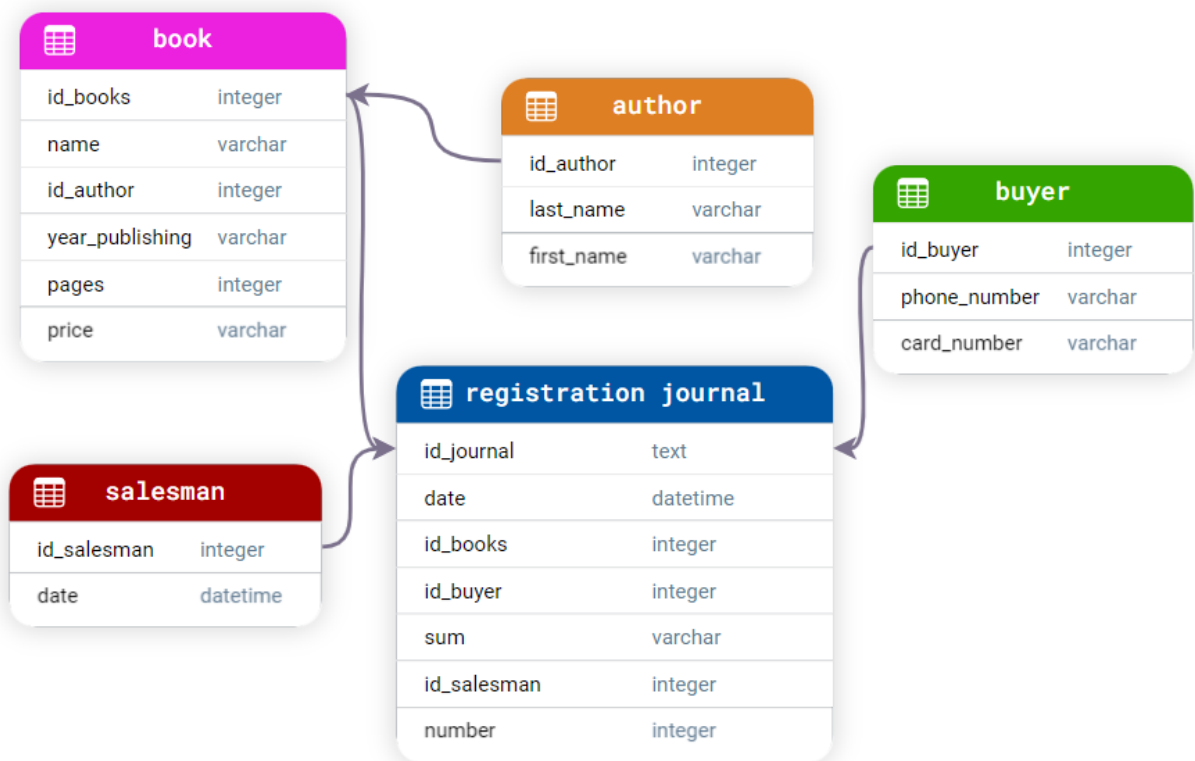


Модель данных



Создание базы данных и подключение к созданной БД

```
postgres=# CREATE DATABASE bookshop;  
CREATE DATABASE  
postgres=# \c bookshop;  
Вы подключены к базе данных "bookshop" как пользователь "postgres".
```

Создание таблиц

```
bookshop=# CREATE TABLE Author(  
bookshop(# id_author int PRIMARY KEY,  
bookshop(# last_name varchar(20) NULL,  
bookshop(# first_name varchar(20) NULL  
bookshop(# );  
CREATE TABLE
```

```
bookshop=# CREATE TABLE Book(  
bookshop(# id_book int PRIMARY KEY,  
bookshop(# name varchar(50) NULL,  
bookshop(# year char(4) NULL,  
bookshop(# pages varchar(6) NULL,  
bookshop(# price varchar(6) NULL,  
bookshop(# id_author int REFERENCES Author(id_author)  
bookshop(# );  
CREATE TABLE
```

```
bookshop=# CREATE TABLE Buyer(
bookshop=# id_buyer int PRIMARY KEY,
bookshop=# phone char(11) NULL,
bookshop=# card_number char(13) NULL);
CREATE TABLE
```

Создание последовательностей

```
bookshop=# create sequence seq_author increment by 1 start with 101 minvalue 100;
CREATE SEQUENCE
bookshop=# create sequence seq_book increment by 1 start with 201 minvalue 200;
CREATE SEQUENCE
bookshop=# create sequence seq_buyer increment by 1 start with 301 minvalue 300;
CREATE SEQUENCE
bookshop=# create sequence seq_journal increment by 1 start with 401 minvalue 400;
CREATE SEQUENCE
bookshop=# create sequence seq_salesman increment by 1 start with 501 minvalue 500;
CREATE SEQUENCE
```

Вывод созданных таблиц и последовательностей

```
bookshop=# \d
```

Схема	Имя	Тип	Владелец
public	author	таблица	postgres
public	book	таблица	postgres
public	buyer	таблица	postgres
public	journal	таблица	postgres
public	salesman	таблица	postgres
public	seq_author	последовательность	postgres
public	seq_book	последовательность	postgres
public	seq_buyer	последовательность	postgres
public	seq_journal	последовательность	postgres
public	seq_salesman	последовательность	postgres

(10 строк)

Ввод данных в таблицы. Вывод заполненной таблицы с помощью оператора **SELECT * FROM название_таблицы.**

```
bookshop=# insert into author values (nextval('seq_author'), 'Толстой', 'Лев');
INSERT 0 1
bookshop=# insert into author values (nextval('seq_author'), 'Пушкин', 'Александр');
INSERT 0 1
bookshop=# insert into author values (nextval('seq_author'), 'Тургенев', 'Иван');
INSERT 0 1
bookshop=# select * from Author;
 id_author | last_name | first_name
-----+-----+-----
      101 | Толстой  | Лев
      102 | Пушкин   | Александр
      103 | Тургенев | Иван
(3 строки)
```

```
bookshop=# insert into book values (nextval('seq_book'), 'Война и мир', '1863', '1000', '700', '101');
INSERT 0 1
bookshop=# insert into book values (nextval('seq_book'), 'Капитанская дочка', '1836', '150', '300', '102');
INSERT 0 1
bookshop=# insert into book values (nextval('seq_book'), 'Муму', '1852', '100', '400', '103');
INSERT 0 1
```

```
bookshop=# select * from Book;
```

id_book	name	year	pages	price	id_author
201	Война и мир	1863	1000	700	101
202	Капитанская дочка	1836	150	300	102
203	Муму	1852	100	400	103

(3 строки)

```
bookshop=# insert into buyer values (nextval('seq_buyer'), '89201234567', '1234567890123');
INSERT 0 1
bookshop=# insert into buyer values (nextval('seq_buyer'), '89209876543', '9876543210987');
INSERT 0 1
bookshop=# insert into buyer values (nextval('seq_buyer'), '89009209203', '2468012345678');
INSERT 0 1
```

```
bookshop=# select * from Buyer;
```

id_buyer	phone	card_number
301	89201234567	1234567890123
302	89209876543	9876543210987
303	89009209203	2468012345678

(3 строки)

```
bookshop=# insert into salesman values (nextval('seq_salesman'), '25.03.2023');
INSERT 0 1
bookshop=# insert into salesman values (nextval('seq_salesman'), '25.02.2023');
INSERT 0 1
```

```
bookshop=# select * from Salesman;
```

id_salesman	date
501	2023-03-25
502	2023-02-25

(2 строки)

```
bookshop=# insert into journal values (nextval('seq_journal'), '25.03.2023', '10000', '25', '203', '301', '502');
INSERT 0 1
bookshop=# insert into journal values (nextval('seq_journal'), '25.02.2023', '8000', '10', '201', '302', '501');
INSERT 0 1
bookshop=# insert into journal values (nextval('seq_journal'), '25.02.2023', '6000', '20', '202', '303', '502');
INSERT 0 1
bookshop=# insert into journal values (nextval('seq_journal'), '25.03.2023', '7000', '15', '203', '301', '501');
INSERT 0 1
bookshop=# insert into journal values (nextval('seq_journal'), '25.02.2023', '4000', '10', '203', '301', '502');
INSERT 0 1
```

```
bookshop=# select * from Journal;
```

id_journal	date	sum	number	id_book	id_buyer	id_salesman
401	2023-03-25	10000	25	203	301	502
402	2023-02-25	8000	10	201	302	501
403	2023-02-25	6000	20	202	303	502
404	2023-03-25	7000	15	203	301	501
405	2023-02-25	4000	10	203	301	502

(5 строк)