**Министерство науки и высшего образования Российской Федерации**

федеральное государственное автономное образовательное учреждение высшего образования

**«НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ ИТМО»**

**Отчет**

по лабораторной работе Создание таблиц базы данных PostgreSQL. Заполнение таблиц рабочими данными

по дисциплине «**Базы данных**»

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# Цель работы

Овладеть практическими навыками создания таблиц базы данных PostgreSQL 1Х, заполнения их рабочими данными, резервного копирования и восстановления БД.

# Практическое задание

1. Создать базу данных с использованием pgAdmin 4 (согласно индивидуальному заданию).
2. Создать схему в составе базы данных.
3. Создать таблицы базы данных.
4. Установить ограничения на данные: *Primary Key, Unique, Check, Foreign Key*.
5. Заполнить таблицы БД рабочими данными.
6. Создать резервную копию БД.

*Указание:*

*Создать две резервные копии:*

* *с расширением CUSTOM для восстановления БД;*
* *с расширением PLAIN для листинга (в отчете);*
* *при создании резервных копий БД настроить параметры Dump options для Type of objects**и**Queries .*

1. Восстановить БД.

# Выполнение

База Данных: library\_bd

ER схема базы данных, сгенерированная при помощи pgAdmin:

Изображение выглядит как диаграмма

Автоматически созданное описание

## Создание дб:

Create Database library\_db;

## dump бд:

--

-- PostgreSQL database dump

--

-- Dumped from database version 15.2

-- Dumped by pg\_dump version 15.2

-- Started on 2023-03-23 23:41:46

SET statement\_timeout = 0;

SET lock\_timeout = 0;

SET idle\_in\_transaction\_session\_timeout = 0;

SET client\_encoding = 'UTF8';

SET standard\_conforming\_strings = on;

SELECT pg\_catalog.set\_config('search\_path', '', false);

SET check\_function\_bodies = false;

SET xmloption = content;

SET client\_min\_messages = warning;

SET row\_security = off;

SET default\_tablespace = '';

SET default\_table\_access\_method = heap;

--

-- TOC entry 228 (class 1259 OID 17311)

-- Name: act\_of\_debiting; Type: TABLE; Schema: public; Owner: postgres

--

CREATE TABLE public.act\_of\_debiting (

number\_document integer NOT NULL,

date\_document date NOT NULL,

type\_document character varying(10) NOT NULL,

id\_employee integer NOT NULL,

reason\_debiting character varying(150) NOT NULL,

revaluation\_coefficient numeric(4,2) NOT NULL,

cost\_after\_revaluation numeric(4,2) NOT NULL,

CONSTRAINT cost\_after\_revaluation CHECK ((cost\_after\_revaluation > (0)::numeric)),

CONSTRAINT date\_act\_check CHECK ((date\_document >= CURRENT\_DATE)),

CONSTRAINT revaluation\_coefficient\_check CHECK ((revaluation\_coefficient > (0)::numeric)),

CONSTRAINT type\_document\_check CHECK (((type\_document)::text = ANY ((ARRAY['Списание'::character varying, 'Переоценка'::character varying, 'Дарение'::character varying, 'Прием на учет'::character varying])::text[])))

);

ALTER TABLE public.act\_of\_debiting OWNER TO postgres;

--

-- TOC entry 225 (class 1259 OID 17261)

-- Name: book; Type: TABLE; Schema: public; Owner: postgres

--

CREATE TABLE public.book (

id\_book integer NOT NULL,

title character varying(100) NOT NULL,

author character varying(80) NOT NULL,

year\_of\_publication integer NOT NULL,

language character varying(15) NOT NULL,

description character varying(250),

id\_publishing integer NOT NULL,

area\_of\_knowledge character varying(80) NOT NULL,

type\_of\_publication character varying(20) NOT NULL,

number\_of\_instances integer NOT NULL,

CONSTRAINT number\_of\_instances CHECK ((number\_of\_instances >= 1)),

CONSTRAINT year\_of\_publication CHECK (((year\_of\_publication)::numeric < EXTRACT(year FROM CURRENT\_DATE)))

);

ALTER TABLE public.book OWNER TO postgres;

--

-- TOC entry 224 (class 1259 OID 17260)

-- Name: book\_id\_book\_seq; Type: SEQUENCE; Schema: public; Owner: postgres

--

CREATE SEQUENCE public.book\_id\_book\_seq

AS integer

START WITH 1

INCREMENT BY 1

NO MINVALUE

NO MAXVALUE

CACHE 1;

ALTER TABLE public.book\_id\_book\_seq OWNER TO postgres;

--

-- TOC entry 3463 (class 0 OID 0)

-- Dependencies: 224

-- Name: book\_id\_book\_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner: postgres

--

ALTER SEQUENCE public.book\_id\_book\_seq OWNED BY public.book.id\_book;

--

-- TOC entry 215 (class 1259 OID 17217)

-- Name: city; Type: TABLE; Schema: public; Owner: postgres

--

CREATE TABLE public.city (

id\_city integer NOT NULL,

city character varying(20) NOT NULL

);

ALTER TABLE public.city OWNER TO postgres;

--

-- TOC entry 214 (class 1259 OID 17216)

-- Name: city\_id\_city\_seq; Type: SEQUENCE; Schema: public; Owner: postgres

--

CREATE SEQUENCE public.city\_id\_city\_seq

AS integer

START WITH 1

INCREMENT BY 1

NO MINVALUE

NO MAXVALUE

CACHE 1;

ALTER TABLE public.city\_id\_city\_seq OWNER TO postgres;

--

-- TOC entry 3464 (class 0 OID 0)

-- Dependencies: 214

-- Name: city\_id\_city\_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner: postgres

--

ALTER SEQUENCE public.city\_id\_city\_seq OWNED BY public.city.id\_city;

--

-- TOC entry 221 (class 1259 OID 17244)

-- Name: employee; Type: TABLE; Schema: public; Owner: postgres

--

CREATE TABLE public.employee (

id\_employee integer NOT NULL,

name character varying(60) NOT NULL,

"position" character varying(20) NOT NULL

);

ALTER TABLE public.employee OWNER TO postgres;

--

-- TOC entry 220 (class 1259 OID 17243)

-- Name: employee\_id\_employee\_seq; Type: SEQUENCE; Schema: public; Owner: postgres

--

CREATE SEQUENCE public.employee\_id\_employee\_seq

AS integer

START WITH 1

INCREMENT BY 1

NO MINVALUE

NO MAXVALUE

CACHE 1;

ALTER TABLE public.employee\_id\_employee\_seq OWNER TO postgres;

--

-- TOC entry 3465 (class 0 OID 0)

-- Dependencies: 220

-- Name: employee\_id\_employee\_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner: postgres

--

ALTER SEQUENCE public.employee\_id\_employee\_seq OWNED BY public.employee.id\_employee;

--

-- TOC entry 232 (class 1259 OID 17358)

-- Name: form; Type: TABLE; Schema: public; Owner: postgres

--

CREATE TABLE public.form (

number\_ticket character varying(10) NOT NULL,

reader character varying(60) NOT NULL,

date\_registration date NOT NULL,

passport\_data character varying(20) NOT NULL,

address character varying(100) NOT NULL,

phone\_number character varying(20),

email character varying(50),

CONSTRAINT date\_registration\_check CHECK ((date\_registration <= CURRENT\_DATE)),

CONSTRAINT email\_check CHECK (((email)::text ~ '^[a-zA-Z0-9\)\(\+\\_\@]+$'::text)),

CONSTRAINT number\_ticket\_check CHECK (((number\_ticket)::text ~ '^[0-9\-\/]+$'::text)),

CONSTRAINT phone\_number\_check CHECK (((phone\_number)::text ~ '^[0-9\)\(\+\-]+$'::text))

);

ALTER TABLE public.form OWNER TO postgres;

--

-- TOC entry 230 (class 1259 OID 17328)

-- Name: instance; Type: TABLE; Schema: public; Owner: postgres

--

CREATE TABLE public.instance (

id\_instance integer NOT NULL,

id\_book integer NOT NULL,

id\_location integer NOT NULL,

cost\_of\_book numeric(6,2) NOT NULL,

CONSTRAINT cost\_of\_book\_check CHECK ((cost\_of\_book > (0)::numeric))

);

ALTER TABLE public.instance OWNER TO postgres;

--

-- TOC entry 229 (class 1259 OID 17327)

-- Name: instance\_id\_instance\_seq; Type: SEQUENCE; Schema: public; Owner: postgres

--

CREATE SEQUENCE public.instance\_id\_instance\_seq

AS integer

START WITH 1

INCREMENT BY 1

NO MINVALUE

NO MAXVALUE

CACHE 1;

ALTER TABLE public.instance\_id\_instance\_seq OWNER TO postgres;

--

-- TOC entry 3466 (class 0 OID 0)

-- Dependencies: 229

-- Name: instance\_id\_instance\_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner: postgres

--

ALTER SEQUENCE public.instance\_id\_instance\_seq OWNED BY public.instance.id\_instance;

--

-- TOC entry 233 (class 1259 OID 17367)

-- Name: issuance\_books; Type: TABLE; Schema: public; Owner: postgres

--

CREATE TABLE public.issuance\_books (

number\_ticket character varying(10) NOT NULL,

id\_instance integer NOT NULL,

id\_employee integer NOT NULL,

date\_of\_issue date NOT NULL,

date\_of\_return date NOT NULL,

CONSTRAINT date\_of\_issue\_check CHECK ((date\_of\_issue >= CURRENT\_DATE)),

CONSTRAINT date\_of\_return\_check CHECK ((date\_of\_issue >= CURRENT\_DATE))

);

ALTER TABLE public.issuance\_books OWNER TO postgres;

--

-- TOC entry 231 (class 1259 OID 17345)

-- Name: list\_of\_debiting; Type: TABLE; Schema: public; Owner: postgres

--

CREATE TABLE public.list\_of\_debiting (

id\_instance integer NOT NULL,

number\_document integer NOT NULL

);

ALTER TABLE public.list\_of\_debiting OWNER TO postgres;

--

-- TOC entry 227 (class 1259 OID 17298)

-- Name: list\_of\_parish; Type: TABLE; Schema: public; Owner: postgres

--

CREATE TABLE public.list\_of\_parish (

id\_book integer NOT NULL,

number\_document integer NOT NULL

);

ALTER TABLE public.list\_of\_parish OWNER TO postgres;

--

-- TOC entry 226 (class 1259 OID 17276)

-- Name: parish\_document; Type: TABLE; Schema: public; Owner: postgres

--

CREATE TABLE public.parish\_document (

number\_document integer NOT NULL,

date\_document date NOT NULL,

type\_document character varying(10) NOT NULL,

id\_provider integer NOT NULL,

id\_employee integer NOT NULL,

number\_books integer NOT NULL,

amount\_parish numeric(12,2) NOT NULL,

CONSTRAINT parish\_document\_date\_check1 CHECK ((date\_document <= CURRENT\_DATE)),

CONSTRAINT parish\_document\_delivery\_amount\_check CHECK ((amount\_parish >= (0)::numeric)),

CONSTRAINT parish\_document\_number\_books\_check CHECK ((number\_books >= 1)),

CONSTRAINT parish\_document\_number\_document\_check CHECK ((number\_document > 0)),

CONSTRAINT parish\_document\_type\_document\_check CHECK (((type\_document)::text = ANY ((ARRAY['Накладная'::character varying, 'Акт'::character varying])::text[])))

);

ALTER TABLE public.parish\_document OWNER TO postgres;

--

-- TOC entry 219 (class 1259 OID 17236)

-- Name: provider; Type: TABLE; Schema: public; Owner: postgres

--

CREATE TABLE public.provider (

id\_provider integer NOT NULL,

name character varying(50) NOT NULL,

address character varying(100) NOT NULL,

phone\_number character varying(20) NOT NULL,

CONSTRAINT provider\_phone\_number\_check CHECK (((phone\_number)::text ~ '[0-9\)\(\+\-]+'::text))

);

ALTER TABLE public.provider OWNER TO postgres;

--

-- TOC entry 218 (class 1259 OID 17235)

-- Name: provider\_id\_provider\_seq; Type: SEQUENCE; Schema: public; Owner: postgres

--

CREATE SEQUENCE public.provider\_id\_provider\_seq

AS integer

START WITH 1

INCREMENT BY 1

NO MINVALUE

NO MAXVALUE

CACHE 1;

ALTER TABLE public.provider\_id\_provider\_seq OWNER TO postgres;

--

-- TOC entry 3467 (class 0 OID 0)

-- Dependencies: 218

-- Name: provider\_id\_provider\_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner: postgres

--

ALTER SEQUENCE public.provider\_id\_provider\_seq OWNED BY public.provider.id\_provider;

--

-- TOC entry 217 (class 1259 OID 17224)

-- Name: publishing; Type: TABLE; Schema: public; Owner: postgres

--

CREATE TABLE public.publishing (

id\_publishing integer NOT NULL,

publishing character varying(15) NOT NULL,

id\_city integer NOT NULL

);

ALTER TABLE public.publishing OWNER TO postgres;

--

-- TOC entry 216 (class 1259 OID 17223)

-- Name: publishing\_id\_publishing\_seq; Type: SEQUENCE; Schema: public; Owner: postgres

--

CREATE SEQUENCE public.publishing\_id\_publishing\_seq

AS integer

START WITH 1

INCREMENT BY 1

NO MINVALUE

NO MAXVALUE

CACHE 1;

ALTER TABLE public.publishing\_id\_publishing\_seq OWNER TO postgres;

--

-- TOC entry 3468 (class 0 OID 0)

-- Dependencies: 216

-- Name: publishing\_id\_publishing\_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner: postgres

--

ALTER SEQUENCE public.publishing\_id\_publishing\_seq OWNED BY public.publishing.id\_publishing;

--

-- TOC entry 223 (class 1259 OID 17251)

-- Name: storage\_location; Type: TABLE; Schema: public; Owner: postgres

--

CREATE TABLE public.storage\_location (

id\_location integer NOT NULL,

room\_number integer NOT NULL,

rack\_number integer NOT NULL,

shelf\_number integer NOT NULL,

CONSTRAINT storage\_location\_rack\_number\_check CHECK ((rack\_number >= 1)),

CONSTRAINT storage\_location\_room\_number\_check CHECK ((room\_number >= 1)),

CONSTRAINT storage\_location\_shelf\_number\_check CHECK ((shelf\_number >= 1))

);

ALTER TABLE public.storage\_location OWNER TO postgres;

--

-- TOC entry 222 (class 1259 OID 17250)

-- Name: storage\_location\_id\_location\_seq; Type: SEQUENCE; Schema: public; Owner: postgres

--

CREATE SEQUENCE public.storage\_location\_id\_location\_seq

AS integer

START WITH 1

INCREMENT BY 1

NO MINVALUE

NO MAXVALUE

CACHE 1;

ALTER TABLE public.storage\_location\_id\_location\_seq OWNER TO postgres;

--

-- TOC entry 3469 (class 0 OID 0)

-- Dependencies: 222

-- Name: storage\_location\_id\_location\_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner: postgres

--

ALTER SEQUENCE public.storage\_location\_id\_location\_seq OWNED BY public.storage\_location.id\_location;

--

-- TOC entry 3232 (class 2604 OID 17264)

-- Name: book id\_book; Type: DEFAULT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.book ALTER COLUMN id\_book SET DEFAULT nextval('public.book\_id\_book\_seq'::regclass);

--

-- TOC entry 3227 (class 2604 OID 17220)

-- Name: city id\_city; Type: DEFAULT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.city ALTER COLUMN id\_city SET DEFAULT nextval('public.city\_id\_city\_seq'::regclass);

--

-- TOC entry 3230 (class 2604 OID 17247)

-- Name: employee id\_employee; Type: DEFAULT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.employee ALTER COLUMN id\_employee SET DEFAULT nextval('public.employee\_id\_employee\_seq'::regclass);

--

-- TOC entry 3233 (class 2604 OID 17331)

-- Name: instance id\_instance; Type: DEFAULT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.instance ALTER COLUMN id\_instance SET DEFAULT nextval('public.instance\_id\_instance\_seq'::regclass);

--

-- TOC entry 3229 (class 2604 OID 17239)

-- Name: provider id\_provider; Type: DEFAULT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.provider ALTER COLUMN id\_provider SET DEFAULT nextval('public.provider\_id\_provider\_seq'::regclass);

--

-- TOC entry 3228 (class 2604 OID 17227)

-- Name: publishing id\_publishing; Type: DEFAULT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.publishing ALTER COLUMN id\_publishing SET DEFAULT nextval('public.publishing\_id\_publishing\_seq'::regclass);

--

-- TOC entry 3231 (class 2604 OID 17254)

-- Name: storage\_location id\_location; Type: DEFAULT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.storage\_location ALTER COLUMN id\_location SET DEFAULT nextval('public.storage\_location\_id\_location\_seq'::regclass);

--

-- TOC entry 3452 (class 0 OID 17311)

-- Dependencies: 228

-- Data for Name: act\_of\_debiting; Type: TABLE DATA; Schema: public; Owner: postgres

--

COPY public.act\_of\_debiting (number\_document, date\_document, type\_document, id\_employee, reason\_debiting, revaluation\_coefficient, cost\_after\_revaluation) FROM stdin;

1 2023-03-23 Дарение 2 Книга с ошибками 0.30 60.90

\.

--

-- TOC entry 3449 (class 0 OID 17261)

-- Dependencies: 225

-- Data for Name: book; Type: TABLE DATA; Schema: public; Owner: postgres

--

COPY public.book (id\_book, title, author, year\_of\_publication, language, description, id\_publishing, area\_of\_knowledge, type\_of\_publication, number\_of\_instances) FROM stdin;

1 Собачье Сердце Михаил Булгаков 1925 русский \N 1 Художественная литература Печатная 3

2 Севастопольские рассказы Л.Н. Толстой 1855 русский \N 2 Художественная литература Печатная 2

3 Цветы для Элджернона Дэниел Киз 1959 русский \N 2 Художественная литература Печатная 2

\.

--

-- TOC entry 3439 (class 0 OID 17217)

-- Dependencies: 215

-- Data for Name: city; Type: TABLE DATA; Schema: public; Owner: postgres

--

COPY public.city (id\_city, city) FROM stdin;

1 Санкт-Петербург

2 Москва

3 Саратов

\.

--

-- TOC entry 3445 (class 0 OID 17244)

-- Dependencies: 221

-- Data for Name: employee; Type: TABLE DATA; Schema: public; Owner: postgres

--

COPY public.employee (id\_employee, name, "position") FROM stdin;

1 Иванов Иван Иванович менеджер

2 Иванов Иван Дмитриевич продавец

\.

--

-- TOC entry 3456 (class 0 OID 17358)

-- Dependencies: 232

-- Data for Name: form; Type: TABLE DATA; Schema: public; Owner: postgres

--

COPY public.form (number\_ticket, reader, date\_registration, passport\_data, address, phone\_number, email) FROM stdin;

1-01 Дмтрий Лидер 2023-03-23 12312323 Санкт-Петербург, дом 1 +7(213)123-21-12 \N

1-11 Александра Лидер 2023-03-23 12312323 Санкт-Петербург, дом 2 +7(223)123-21-12 \N

\.

--

-- TOC entry 3454 (class 0 OID 17328)

-- Dependencies: 230

-- Data for Name: instance; Type: TABLE DATA; Schema: public; Owner: postgres

--

COPY public.instance (id\_instance, id\_book, id\_location, cost\_of\_book) FROM stdin;

1 1 1 200.00

2 2 1 203.00

\.

--

-- TOC entry 3457 (class 0 OID 17367)

-- Dependencies: 233

-- Data for Name: issuance\_books; Type: TABLE DATA; Schema: public; Owner: postgres

--

COPY public.issuance\_books (number\_ticket, id\_instance, id\_employee, date\_of\_issue, date\_of\_return) FROM stdin;

1-01 2 2 2023-03-23 2023-03-23

\.

--

-- TOC entry 3455 (class 0 OID 17345)

-- Dependencies: 231

-- Data for Name: list\_of\_debiting; Type: TABLE DATA; Schema: public; Owner: postgres

--

COPY public.list\_of\_debiting (id\_instance, number\_document) FROM stdin;

1 1

\.

--

-- TOC entry 3451 (class 0 OID 17298)

-- Dependencies: 227

-- Data for Name: list\_of\_parish; Type: TABLE DATA; Schema: public; Owner: postgres

--

COPY public.list\_of\_parish (id\_book, number\_document) FROM stdin;

1 11

\.

--

-- TOC entry 3450 (class 0 OID 17276)

-- Dependencies: 226

-- Data for Name: parish\_document; Type: TABLE DATA; Schema: public; Owner: postgres

--

COPY public.parish\_document (number\_document, date\_document, type\_document, id\_provider, id\_employee, number\_books, amount\_parish) FROM stdin;

11 2023-03-23 Акт 1 1 3 3000.00

\.

--

-- TOC entry 3443 (class 0 OID 17236)

-- Dependencies: 219

-- Data for Name: provider; Type: TABLE DATA; Schema: public; Owner: postgres

--

COPY public.provider (id\_provider, name, address, phone\_number) FROM stdin;

1 Поставщик г.Моска, ул. Арбат 1 +7(234)123-21-11

2 Поставщик2 г.Моска, ул. Арбат 2 +7(234)122-23-61

\.

--

-- TOC entry 3441 (class 0 OID 17224)

-- Dependencies: 217

-- Data for Name: publishing; Type: TABLE DATA; Schema: public; Owner: postgres

--

COPY public.publishing (id\_publishing, publishing, id\_city) FROM stdin;

1 Питер 1

2 Азбука 2

\.

--

-- TOC entry 3447 (class 0 OID 17251)

-- Dependencies: 223

-- Data for Name: storage\_location; Type: TABLE DATA; Schema: public; Owner: postgres

--

COPY public.storage\_location (id\_location, room\_number, rack\_number, shelf\_number) FROM stdin;

1 1 1 1

2 2 2 2

\.

--

-- TOC entry 3470 (class 0 OID 0)

-- Dependencies: 224

-- Name: book\_id\_book\_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres

--

SELECT pg\_catalog.setval('public.book\_id\_book\_seq', 3, true);

--

-- TOC entry 3471 (class 0 OID 0)

-- Dependencies: 214

-- Name: city\_id\_city\_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres

--

SELECT pg\_catalog.setval('public.city\_id\_city\_seq', 3, true);

--

-- TOC entry 3472 (class 0 OID 0)

-- Dependencies: 220

-- Name: employee\_id\_employee\_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres

--

SELECT pg\_catalog.setval('public.employee\_id\_employee\_seq', 2, true);

--

-- TOC entry 3473 (class 0 OID 0)

-- Dependencies: 229

-- Name: instance\_id\_instance\_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres

--

SELECT pg\_catalog.setval('public.instance\_id\_instance\_seq', 2, true);

--

-- TOC entry 3474 (class 0 OID 0)

-- Dependencies: 218

-- Name: provider\_id\_provider\_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres

--

SELECT pg\_catalog.setval('public.provider\_id\_provider\_seq', 2, true);

--

-- TOC entry 3475 (class 0 OID 0)

-- Dependencies: 216

-- Name: publishing\_id\_publishing\_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres

--

SELECT pg\_catalog.setval('public.publishing\_id\_publishing\_seq', 2, true);

--

-- TOC entry 3476 (class 0 OID 0)

-- Dependencies: 222

-- Name: storage\_location\_id\_location\_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres

--

SELECT pg\_catalog.setval('public.storage\_location\_id\_location\_seq', 2, true);

--

-- TOC entry 3273 (class 2606 OID 17321)

-- Name: act\_of\_debiting act\_of\_debiting\_number\_act\_uniqe; Type: CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.act\_of\_debiting

ADD CONSTRAINT act\_of\_debiting\_number\_act\_uniqe UNIQUE (number\_document);

--

-- TOC entry 3275 (class 2606 OID 17319)

-- Name: act\_of\_debiting act\_of\_debiting\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.act\_of\_debiting

ADD CONSTRAINT act\_of\_debiting\_pkey PRIMARY KEY (number\_document, type\_document);

--

-- TOC entry 3257 (class 2606 OID 17222)

-- Name: city city\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.city

ADD CONSTRAINT city\_pkey PRIMARY KEY (id\_city);

--

-- TOC entry 3263 (class 2606 OID 17249)

-- Name: employee employee\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.employee

ADD CONSTRAINT employee\_pkey PRIMARY KEY (id\_employee);

--

-- TOC entry 3279 (class 2606 OID 17366)

-- Name: form form\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.form

ADD CONSTRAINT form\_pkey PRIMARY KEY (number\_ticket);

--

-- TOC entry 3267 (class 2606 OID 17270)

-- Name: book id\_book\_pk; Type: CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.book

ADD CONSTRAINT id\_book\_pk PRIMARY KEY (id\_book);

--

-- TOC entry 3277 (class 2606 OID 17334)

-- Name: instance instance\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.instance

ADD CONSTRAINT instance\_pkey PRIMARY KEY (id\_instance);

--

-- TOC entry 3269 (class 2606 OID 17285)

-- Name: parish\_document parish\_document\_pk; Type: CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.parish\_document

ADD CONSTRAINT parish\_document\_pk PRIMARY KEY (number\_document, type\_document);

--

-- TOC entry 3271 (class 2606 OID 17287)

-- Name: parish\_document parish\_document\_unique; Type: CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.parish\_document

ADD CONSTRAINT parish\_document\_unique UNIQUE (number\_document);

--

-- TOC entry 3281 (class 2606 OID 17373)

-- Name: issuance\_books pkey; Type: CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.issuance\_books

ADD CONSTRAINT pkey PRIMARY KEY (number\_ticket);

--

-- TOC entry 3261 (class 2606 OID 17242)

-- Name: provider provider\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.provider

ADD CONSTRAINT provider\_pkey PRIMARY KEY (id\_provider);

--

-- TOC entry 3259 (class 2606 OID 17229)

-- Name: publishing publishing\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.publishing

ADD CONSTRAINT publishing\_pkey PRIMARY KEY (id\_publishing);

--

-- TOC entry 3265 (class 2606 OID 17259)

-- Name: storage\_location storage\_location\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.storage\_location

ADD CONSTRAINT storage\_location\_pkey PRIMARY KEY (id\_location);

--

-- TOC entry 3282 (class 2606 OID 17230)

-- Name: publishing code\_city; Type: FK CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.publishing

ADD CONSTRAINT code\_city FOREIGN KEY (id\_city) REFERENCES public.city(id\_city);

--

-- TOC entry 3293 (class 2606 OID 17374)

-- Name: issuance\_books code\_employee; Type: FK CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.issuance\_books

ADD CONSTRAINT code\_employee FOREIGN KEY (id\_employee) REFERENCES public.employee(id\_employee);

--

-- TOC entry 3288 (class 2606 OID 17322)

-- Name: act\_of\_debiting code\_employee\_fk; Type: FK CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.act\_of\_debiting

ADD CONSTRAINT code\_employee\_fk FOREIGN KEY (id\_employee) REFERENCES public.employee(id\_employee);

--

-- TOC entry 3283 (class 2606 OID 17271)

-- Name: book code\_publishing; Type: FK CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.book

ADD CONSTRAINT code\_publishing FOREIGN KEY (id\_publishing) REFERENCES public.publishing(id\_publishing);

--

-- TOC entry 3286 (class 2606 OID 17301)

-- Name: list\_of\_parish id\_book\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.list\_of\_parish

ADD CONSTRAINT id\_book\_fkey FOREIGN KEY (id\_book) REFERENCES public.book(id\_book);

--

-- TOC entry 3287 (class 2606 OID 17306)

-- Name: list\_of\_parish id\_document\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.list\_of\_parish

ADD CONSTRAINT id\_document\_fkey FOREIGN KEY (number\_document) REFERENCES public.parish\_document(number\_document);

--

-- TOC entry 3291 (class 2606 OID 17348)

-- Name: list\_of\_debiting id\_instance\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.list\_of\_debiting

ADD CONSTRAINT id\_instance\_fkey FOREIGN KEY (id\_instance) REFERENCES public.instance(id\_instance);

--

-- TOC entry 3289 (class 2606 OID 17335)

-- Name: instance instance\_code\_location\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.instance

ADD CONSTRAINT instance\_code\_location\_fkey FOREIGN KEY (id\_location) REFERENCES public.storage\_location(id\_location);

--

-- TOC entry 3290 (class 2606 OID 17340)

-- Name: instance instance\_registration\_number\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.instance

ADD CONSTRAINT instance\_registration\_number\_fkey FOREIGN KEY (id\_book) REFERENCES public.book(id\_book);

--

-- TOC entry 3294 (class 2606 OID 17384)

-- Name: issuance\_books inventory\_number; Type: FK CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.issuance\_books

ADD CONSTRAINT inventory\_number FOREIGN KEY (id\_instance) REFERENCES public.instance(id\_instance);

--

-- TOC entry 3292 (class 2606 OID 17353)

-- Name: list\_of\_debiting number\_document\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.list\_of\_debiting

ADD CONSTRAINT number\_document\_fkey FOREIGN KEY (number\_document) REFERENCES public.act\_of\_debiting(number\_document);

--

-- TOC entry 3295 (class 2606 OID 17379)

-- Name: issuance\_books number\_ticket; Type: FK CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.issuance\_books

ADD CONSTRAINT number\_ticket FOREIGN KEY (number\_ticket) REFERENCES public.form(number\_ticket);

--

-- TOC entry 3284 (class 2606 OID 17288)

-- Name: parish\_document parish\_document\_employee\_code\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.parish\_document

ADD CONSTRAINT parish\_document\_employee\_code\_fkey FOREIGN KEY (id\_employee) REFERENCES public.employee(id\_employee);

--

-- TOC entry 3285 (class 2606 OID 17293)

-- Name: parish\_document parish\_document\_provider\_code\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public.parish\_document

ADD CONSTRAINT parish\_document\_provider\_code\_fkey FOREIGN KEY (id\_provider) REFERENCES public.provider(id\_provider);

-- Completed on 2023-03-23 23:41:46

--

-- PostgreSQL database dump complete

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# Вывод:

В ходе проделанной работы были освоены стандартные инструменты графического интерфейса для СУБД PostgreSQL, также инструменты резервного копирования и восстановления БД.