**Министерство образования и науки Российской Федерации**

**ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ АВТОНОМНОЕ ОБРАЗОВАТЕЛЬНОЕ УЧРЕЖДЕНИЕ ВЫСШЕГО ОБРАЗОВАНИЯ**

**“САНКТ-ПЕТЕРБУРГСКИЙ НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ,**

**МЕХАНИКИ И ОПТИКИ”**

**ФАКУЛЬТЕТ СРЕДНЕГО ПРОФЕССИОНАЛЬНОГО ОБРАЗОВАНИЯ**

ОТЧЕТ

ПО ЛАБОРАТОРНОЙ РАБОТЕ № 4

**«СОЗДАНИЕ БАЗЫ В POSTGRESQL»**

Специальность 09.02.03«Программирование в компьютерных системах» ПМ.02 Разработка и администрирование баз данных

МДК.02.02 Технология разработки и защиты баз данных

|  |  |
| --- | --- |
| Преподаватель: Говоров А.И.  « » 2020г.  Оценка | Выполнил(и):  студент группы Y2339 Карелова А.С. |

Санкт-Петербург 2020

# ХОД РАБОТЫ

## ЦЕЛЬ РАБОТЫ

Овладеть практическими навыками создания базы данных в PostgreSQL.

* 1. ИНДИВИДУАЛЬНОЕ ЗАДАНИЕ

Вариант №10: создать программную систему, предназначенную для администрации лечебной клиники.

1. ВЫПОЛНЕНИЕ
   1. ОПИСАНИЕ ПРЕДМЕТНОЙ ОБЛАСТИ ДЛЯ ВЫДЕЛЕНИЯ ФУНКЦИОНАЛЬНОЙ ЗАВИСИМОСТИ

Прием пациентов ведут несколько врачей различных специализаций. На каждого пациента клиники заводится медицинская карта, в которой отражается вся информация по личным данным больного и истории его заболеваний (диагнозы). При очередном посещении врача в карте отражается дата и время приема, диагноз, текущее состояние больного, рекомендации по лечению. Так как прием ведется только на коммерческой основе, после очередного посещения пациент должен оплатить медицинские услуги (каждый прием оплачивается отдельно). Расчет стоимости посещения определяется врачом согласно прейскуранту по клинике. Для ведения внутренней отчетности необходима следующая информация о враче: фамилия, имя, отчество, специальность, образование, пол, дата рождения и дата начала и окончания работы в клинике, данные по трудовому договору. Для каждого врача составляется график работы с указанием рабочих и выходных дней. Прием пациентов врачи могут вести в разных кабинетах. Каждый кабинет имеет определенный режим работы, ответственного и внутренний телефон.

* 1. SQL КОД

--

-- PostgreSQL database dump

--

-- Dumped from database version 10.11

-- Dumped by pg\_dump version 10.11

-- Started on 2020-10-28 02:48:08

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;

--

-- TOC entry 2843 (class 1262 OID 25011)

-- Name: Private\_clinic; Type: DATABASE; Schema: -; Owner: postgres

--

CREATE DATABASE "Private\_clinic" WITH TEMPLATE = template0 ENCODING = 'UTF8' LC\_COLLATE = 'Russian\_Russia.1251' LC\_CTYPE = 'Russian\_Russia.1251';

ALTER DATABASE "Private\_clinic" OWNER TO postgres;

\connect "Private\_clinic"

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;

--

-- TOC entry 2844 (class 0 OID 0)

-- Dependencies: 2843

-- Name: DATABASE "Private\_clinic"; Type: COMMENT; Schema: -; Owner: postgres

--

COMMENT ON DATABASE "Private\_clinic" IS 'A database for a private clinic.';

--

-- TOC entry 4 (class 2615 OID 25012)

-- Name: Clinic1; Type: SCHEMA; Schema: -; Owner: postgres

--

CREATE SCHEMA "Clinic1";

ALTER SCHEMA "Clinic1" OWNER TO postgres;

--

-- TOC entry 1 (class 3079 OID 12924)

-- Name: plpgsql; Type: EXTENSION; Schema: -; Owner:

--

CREATE EXTENSION IF NOT EXISTS plpgsql WITH SCHEMA pg\_catalog;

--

-- TOC entry 2846 (class 0 OID 0)

-- Dependencies: 1

-- Name: EXTENSION plpgsql; Type: COMMENT; Schema: -; Owner:

--

COMMENT ON EXTENSION plpgsql IS 'PL/pgSQL procedural language';

SET default\_tablespace = '';

SET default\_with\_oids = false;

--

-- TOC entry 201 (class 1259 OID 25108)

-- Name: appointment; Type: TABLE; Schema: Clinic1; Owner: postgres

--

CREATE TABLE "Clinic1".appointment (

a\_id integer NOT NULL,

a\_doctor integer NOT NULL,

a\_patient integer NOT NULL,

a\_cabinet integer NOT NULL,

a\_date date NOT NULL,

a\_payment integer NOT NULL,

a\_time\_start time without time zone NOT NULL,

a\_time\_end time without time zone NOT NULL,

a\_diagnosis text,

a\_recepy text

);

ALTER TABLE "Clinic1".appointment OWNER TO postgres;

--

-- TOC entry 2847 (class 0 OID 0)

-- Dependencies: 201

-- Name: TABLE appointment; Type: COMMENT; Schema: Clinic1; Owner: postgres

--

COMMENT ON TABLE "Clinic1".appointment IS 'Table containing information about every appointment, including the doctor, the patient, etc.';

--

-- TOC entry 199 (class 1259 OID 25029)

-- Name: cabinet; Type: TABLE; Schema: Clinic1; Owner: postgres

--

CREATE TABLE "Clinic1".cabinet (

c\_number integer NOT NULL,

c\_wt\_start time without time zone NOT NULL,

c\_wt\_end time without time zone NOT NULL,

c\_phone\_num integer NOT NULL

);

ALTER TABLE "Clinic1".cabinet OWNER TO postgres;

--

-- TOC entry 2848 (class 0 OID 0)

-- Dependencies: 199

-- Name: TABLE cabinet; Type: COMMENT; Schema: Clinic1; Owner: postgres

--

COMMENT ON TABLE "Clinic1".cabinet IS 'Information about the cabinet: number, working time and phone number.';

--

-- TOC entry 200 (class 1259 OID 25098)

-- Name: d\_schedule; Type: TABLE; Schema: Clinic1; Owner: postgres

--

CREATE TABLE "Clinic1".d\_schedule (

mn\_start time without time zone,

mn\_end time without time zone,

tu\_start time without time zone,

tu\_end time without time zone,

wed\_start time without time zone,

wed\_end time without time zone,

th\_start time without time zone,

th\_end time without time zone,

fr\_start time without time zone,

fr\_end time without time zone,

sat\_start time without time zone,

sat\_end time without time zone,

sun\_start time without time zone,

sun\_end time with time zone,

doctor integer NOT NULL

);

ALTER TABLE "Clinic1".d\_schedule OWNER TO postgres;

--

-- TOC entry 2849 (class 0 OID 0)

-- Dependencies: 200

-- Name: TABLE d\_schedule; Type: COMMENT; Schema: Clinic1; Owner: postgres

--

COMMENT ON TABLE "Clinic1".d\_schedule IS 'Doctor''s schedule: long and confusing.';

--

-- TOC entry 198 (class 1259 OID 25021)

-- Name: doctor; Type: TABLE; Schema: Clinic1; Owner: postgres

--

CREATE TABLE "Clinic1".doctor (

d\_id integer NOT NULL,

d\_full\_name text NOT NULL,

d\_gender boolean NOT NULL,

d\_dob date NOT NULL,

d\_education text NOT NULL,

d\_profession text NOT NULL,

d\_phone\_num integer NOT NULL,

d\_address text NOT NULL

);

ALTER TABLE "Clinic1".doctor OWNER TO postgres;

--

-- TOC entry 2850 (class 0 OID 0)

-- Dependencies: 198

-- Name: TABLE doctor; Type: COMMENT; Schema: Clinic1; Owner: postgres

--

COMMENT ON TABLE "Clinic1".doctor IS 'Information on doctor: id, name, profession, etc.';

--

-- TOC entry 197 (class 1259 OID 25013)

-- Name: medical\_card; Type: TABLE; Schema: Clinic1; Owner: postgres

--

CREATE TABLE "Clinic1".medical\_card (

mc\_id integer NOT NULL,

mc\_full\_name text NOT NULL,

mc\_gender boolean NOT NULL,

mc\_dob date NOT NULL,

mc\_address text NOT NULL,

mc\_phone\_num integer NOT NULL

);

ALTER TABLE "Clinic1".medical\_card OWNER TO postgres;

--

-- TOC entry 2851 (class 0 OID 0)

-- Dependencies: 197

-- Name: TABLE medical\_card; Type: COMMENT; Schema: Clinic1; Owner: postgres

--

COMMENT ON TABLE "Clinic1".medical\_card IS 'Information about patient: id, name, gender, etc.';

--

-- TOC entry 202 (class 1259 OID 25133)

-- Name: payment; Type: TABLE; Schema: Clinic1; Owner: postgres

--

CREATE TABLE "Clinic1".payment (

p\_id integer NOT NULL,

p\_sum integer NOT NULL,

p\_date\_opened date NOT NULL,

p\_date\_closed date

);

ALTER TABLE "Clinic1".payment OWNER TO postgres;

--

-- TOC entry 2852 (class 0 OID 0)

-- Dependencies: 202

-- Name: TABLE payment; Type: COMMENT; Schema: Clinic1; Owner: postgres

--

COMMENT ON TABLE "Clinic1".payment IS 'Information on payment: id, sum, opened and closed.';

--

-- TOC entry 2836 (class 0 OID 25108)

-- Dependencies: 201

-- Data for Name: appointment; Type: TABLE DATA; Schema: Clinic1; Owner: postgres

--

INSERT INTO "Clinic1".appointment (a\_id, a\_doctor, a\_patient, a\_cabinet, a\_date, a\_payment, a\_time\_start, a\_time\_end, a\_diagnosis, a\_recepy) VALUES (2, 1, 5, 5, '2020-02-02', 2, '09:30:00', '11:30:00', 'Depression', 'sdshjtrol');

INSERT INTO "Clinic1".appointment (a\_id, a\_doctor, a\_patient, a\_cabinet, a\_date, a\_payment, a\_time\_start, a\_time\_end, a\_diagnosis, a\_recepy) VALUES (3, 6, 2, 1, '2020-02-02', 3, '10:00:00', '11:00:00', NULL, NULL);

INSERT INTO "Clinic1".appointment (a\_id, a\_doctor, a\_patient, a\_cabinet, a\_date, a\_payment, a\_time\_start, a\_time\_end, a\_diagnosis, a\_recepy) VALUES (6, 8, 3, 4, '2020-02-05', 6, '10:00:00', '11:00:00', 'acne', 'cream');

INSERT INTO "Clinic1".appointment (a\_id, a\_doctor, a\_patient, a\_cabinet, a\_date, a\_payment, a\_time\_start, a\_time\_end, a\_diagnosis, a\_recepy) VALUES (5, 5, 8, 8, '2020-02-04', 5, '10:00:00', '11:00:00', 'anxiety', 'pills');

INSERT INTO "Clinic1".appointment (a\_id, a\_doctor, a\_patient, a\_cabinet, a\_date, a\_payment, a\_time\_start, a\_time\_end, a\_diagnosis, a\_recepy) VALUES (1, 2, 1, 5, '2020-02-01', 1, '10:00:00', '11:00:00', 'chlamidia', NULL);

INSERT INTO "Clinic1".appointment (a\_id, a\_doctor, a\_patient, a\_cabinet, a\_date, a\_payment, a\_time\_start, a\_time\_end, a\_diagnosis, a\_recepy) VALUES (7, 7, 7, 7, '2020-02-05', 7, '12:00:00', '12:30:00', 'miosis', 'drops');

INSERT INTO "Clinic1".appointment (a\_id, a\_doctor, a\_patient, a\_cabinet, a\_date, a\_payment, a\_time\_start, a\_time\_end, a\_diagnosis, a\_recepy) VALUES (8, 8, 3, 5, '2020-02-06', 8, '11:00:00', '13:00:00', 'vitiligo', NULL);

INSERT INTO "Clinic1".appointment (a\_id, a\_doctor, a\_patient, a\_cabinet, a\_date, a\_payment, a\_time\_start, a\_time\_end, a\_diagnosis, a\_recepy) VALUES (4, 3, 3, 2, '2020-02-03', 4, '09:30:00', '11:30:00', 'miosis', 'glasses');

--

-- TOC entry 2834 (class 0 OID 25029)

-- Dependencies: 199

-- Data for Name: cabinet; Type: TABLE DATA; Schema: Clinic1; Owner: postgres

--

INSERT INTO "Clinic1".cabinet (c\_number, c\_wt\_start, c\_wt\_end, c\_phone\_num) VALUES (1, '10:30:00', '17:45:00', 1111111);

INSERT INTO "Clinic1".cabinet (c\_number, c\_wt\_start, c\_wt\_end, c\_phone\_num) VALUES (2, '08:00:00', '20:45:00', 2222222);

INSERT INTO "Clinic1".cabinet (c\_number, c\_wt\_start, c\_wt\_end, c\_phone\_num) VALUES (3, '09:15:00', '20:45:00', 3333333);

INSERT INTO "Clinic1".cabinet (c\_number, c\_wt\_start, c\_wt\_end, c\_phone\_num) VALUES (4, '11:30:00', '18:45:00', 4444444);

INSERT INTO "Clinic1".cabinet (c\_number, c\_wt\_start, c\_wt\_end, c\_phone\_num) VALUES (5, '09:15:00', '20:45:00', 5555555);

INSERT INTO "Clinic1".cabinet (c\_number, c\_wt\_start, c\_wt\_end, c\_phone\_num) VALUES (6, '11:30:00', '18:45:00', 6666666);

INSERT INTO "Clinic1".cabinet (c\_number, c\_wt\_start, c\_wt\_end, c\_phone\_num) VALUES (7, '09:15:00', '20:45:00', 7777777);

INSERT INTO "Clinic1".cabinet (c\_number, c\_wt\_start, c\_wt\_end, c\_phone\_num) VALUES (8, '11:30:00', '18:45:00', 8888888);

--

-- TOC entry 2835 (class 0 OID 25098)

-- Dependencies: 200

-- Data for Name: d\_schedule; Type: TABLE DATA; Schema: Clinic1; Owner: postgres

--

INSERT INTO "Clinic1".d\_schedule (mn\_start, mn\_end, tu\_start, tu\_end, wed\_start, wed\_end, th\_start, th\_end, fr\_start, fr\_end, sat\_start, sat\_end, sun\_start, sun\_end, doctor) VALUES ('08:00:00', '19:00:00', NULL, NULL, '10:00:00', '19:00:00', NULL, NULL, NULL, NULL, '08:00:00', '19:00:00', NULL, NULL, 1);

INSERT INTO "Clinic1".d\_schedule (mn\_start, mn\_end, tu\_start, tu\_end, wed\_start, wed\_end, th\_start, th\_end, fr\_start, fr\_end, sat\_start, sat\_end, sun\_start, sun\_end, doctor) VALUES ('11:00:00', '19:00:00', '11:00:00', '19:00:00', '11:00:00', '19:00:00', '11:00:00', '19:00:00', '11:00:00', '19:00:00', NULL, NULL, NULL, NULL, 2);

INSERT INTO "Clinic1".d\_schedule (mn\_start, mn\_end, tu\_start, tu\_end, wed\_start, wed\_end, th\_start, th\_end, fr\_start, fr\_end, sat\_start, sat\_end, sun\_start, sun\_end, doctor) VALUES ('11:00:00', '19:00:00', '11:00:00', '19:00:00', '11:00:00', '19:00:00', '11:00:00', '19:00:00', '11:00:00', '19:00:00', NULL, NULL, NULL, NULL, 3);

INSERT INTO "Clinic1".d\_schedule (mn\_start, mn\_end, tu\_start, tu\_end, wed\_start, wed\_end, th\_start, th\_end, fr\_start, fr\_end, sat\_start, sat\_end, sun\_start, sun\_end, doctor) VALUES ('11:00:00', '19:00:00', '11:00:00', '19:00:00', '11:00:00', '19:00:00', '11:00:00', '19:00:00', '11:00:00', '19:00:00', NULL, NULL, NULL, NULL, 4);

INSERT INTO "Clinic1".d\_schedule (mn\_start, mn\_end, tu\_start, tu\_end, wed\_start, wed\_end, th\_start, th\_end, fr\_start, fr\_end, sat\_start, sat\_end, sun\_start, sun\_end, doctor) VALUES ('11:00:00', '19:00:00', '11:00:00', '19:00:00', '11:00:00', '19:00:00', '11:00:00', '19:00:00', '11:00:00', '19:00:00', NULL, NULL, NULL, NULL, 5);

INSERT INTO "Clinic1".d\_schedule (mn\_start, mn\_end, tu\_start, tu\_end, wed\_start, wed\_end, th\_start, th\_end, fr\_start, fr\_end, sat\_start, sat\_end, sun\_start, sun\_end, doctor) VALUES ('11:00:00', '19:00:00', '11:00:00', '19:00:00', '11:00:00', '19:00:00', '11:00:00', '19:00:00', '11:00:00', '19:00:00', NULL, NULL, NULL, NULL, 6);

INSERT INTO "Clinic1".d\_schedule (mn\_start, mn\_end, tu\_start, tu\_end, wed\_start, wed\_end, th\_start, th\_end, fr\_start, fr\_end, sat\_start, sat\_end, sun\_start, sun\_end, doctor) VALUES ('11:00:00', '19:00:00', '11:00:00', '19:00:00', '11:00:00', '19:00:00', '11:00:00', '19:00:00', '11:00:00', '19:00:00', NULL, NULL, NULL, NULL, 7);

INSERT INTO "Clinic1".d\_schedule (mn\_start, mn\_end, tu\_start, tu\_end, wed\_start, wed\_end, th\_start, th\_end, fr\_start, fr\_end, sat\_start, sat\_end, sun\_start, sun\_end, doctor) VALUES ('08:00:00', '19:00:00', NULL, NULL, '10:00:00', '19:00:00', NULL, NULL, NULL, NULL, '08:00:00', '19:00:00', NULL, NULL, 8);

--

-- TOC entry 2833 (class 0 OID 25021)

-- Dependencies: 198

-- Data for Name: doctor; Type: TABLE DATA; Schema: Clinic1; Owner: postgres

--

INSERT INTO "Clinic1".doctor (d\_id, d\_full\_name, d\_gender, d\_dob, d\_education, d\_profession, d\_phone\_num, d\_address) VALUES (1, 'Doctor 1', true, '1978-01-01', '8 years', 'psychologyst', 1265522, 'Street 5 home 5 flat 5');

INSERT INTO "Clinic1".doctor (d\_id, d\_full\_name, d\_gender, d\_dob, d\_education, d\_profession, d\_phone\_num, d\_address) VALUES (2, 'Doctor 2', false, '1983-03-03', '10 years', 'gynecologist', 1234244, 'Street 6 home 6 flat 6');

INSERT INTO "Clinic1".doctor (d\_id, d\_full\_name, d\_gender, d\_dob, d\_education, d\_profession, d\_phone\_num, d\_address) VALUES (3, 'Doctor 3', false, '1989-04-01', '6 years', 'optometrist', 5623447, 'Street 7 home 7 flat 7');

INSERT INTO "Clinic1".doctor (d\_id, d\_full\_name, d\_gender, d\_dob, d\_education, d\_profession, d\_phone\_num, d\_address) VALUES (4, 'Doctor 4', true, '1967-09-02', '12 years', 'endocrinologist', 1238899, 'Street 8 home 8 flat 8');

INSERT INTO "Clinic1".doctor (d\_id, d\_full\_name, d\_gender, d\_dob, d\_education, d\_profession, d\_phone\_num, d\_address) VALUES (5, 'Doctor 5', true, '1977-01-01', '8 years', 'psychologyst', 1265521, 'Street 5 home 5 flat 4');

INSERT INTO "Clinic1".doctor (d\_id, d\_full\_name, d\_gender, d\_dob, d\_education, d\_profession, d\_phone\_num, d\_address) VALUES (6, 'Doctor 6', false, '1982-03-03', '10 years', 'gynecologist', 1234243, 'Street 6 home 6 flat 5');

INSERT INTO "Clinic1".doctor (d\_id, d\_full\_name, d\_gender, d\_dob, d\_education, d\_profession, d\_phone\_num, d\_address) VALUES (7, 'Doctor 7', false, '1988-04-01', '6 years', 'optometrist', 5623446, 'Street 7 home 7 flat 6');

INSERT INTO "Clinic1".doctor (d\_id, d\_full\_name, d\_gender, d\_dob, d\_education, d\_profession, d\_phone\_num, d\_address) VALUES (8, 'Doctor 8', true, '1966-09-02', '12 years', 'endocrinologist', 1238898, 'Street 8 home 8 flat 7');

--

-- TOC entry 2832 (class 0 OID 25013)

-- Dependencies: 197

-- Data for Name: medical\_card; Type: TABLE DATA; Schema: Clinic1; Owner: postgres

--

INSERT INTO "Clinic1".medical\_card (mc\_id, mc\_full\_name, mc\_gender, mc\_dob, mc\_address, mc\_phone\_num) VALUES (1, 'Patient 1', true, '1990-12-20', 'Street 1 home 1 flat 1', 1532789);

INSERT INTO "Clinic1".medical\_card (mc\_id, mc\_full\_name, mc\_gender, mc\_dob, mc\_address, mc\_phone\_num) VALUES (2, 'Patient 2', true, '1990-10-20', 'Street 2 home 1 flat 1', 1532718);

INSERT INTO "Clinic1".medical\_card (mc\_id, mc\_full\_name, mc\_gender, mc\_dob, mc\_address, mc\_phone\_num) VALUES (3, 'Patient 3', false, '1970-01-01', 'Street 3 home 1 flat 1', 1532234);

INSERT INTO "Clinic1".medical\_card (mc\_id, mc\_full\_name, mc\_gender, mc\_dob, mc\_address, mc\_phone\_num) VALUES (4, 'Patient 4', false, '2001-02-20', 'Street 4 home 1 flat 1', 3445119);

INSERT INTO "Clinic1".medical\_card (mc\_id, mc\_full\_name, mc\_gender, mc\_dob, mc\_address, mc\_phone\_num) VALUES (5, 'Patient 5', false, '1989-12-20', 'Street 10 home 1 flat 1', 1532727);

INSERT INTO "Clinic1".medical\_card (mc\_id, mc\_full\_name, mc\_gender, mc\_dob, mc\_address, mc\_phone\_num) VALUES (6, 'Patient 6', false, '1970-04-13', 'Street 11 home 11 flat 1', 3482328);

INSERT INTO "Clinic1".medical\_card (mc\_id, mc\_full\_name, mc\_gender, mc\_dob, mc\_address, mc\_phone\_num) VALUES (7, 'Patient 7', true, '1964-11-10', 'Street 9 home 2 flat 1', 4321000);

INSERT INTO "Clinic1".medical\_card (mc\_id, mc\_full\_name, mc\_gender, mc\_dob, mc\_address, mc\_phone\_num) VALUES (8, 'Patient 8', false, '1994-09-05', 'Street 13 home 1 flat 1', 3432899);

--

-- TOC entry 2837 (class 0 OID 25133)

-- Dependencies: 202

-- Data for Name: payment; Type: TABLE DATA; Schema: Clinic1; Owner: postgres

--

INSERT INTO "Clinic1".payment (p\_id, p\_sum, p\_date\_opened, p\_date\_closed) VALUES (1, 1000, '2020-02-01', '2020-02-01');

INSERT INTO "Clinic1".payment (p\_id, p\_sum, p\_date\_opened, p\_date\_closed) VALUES (2, 3000, '2020-02-02', '2020-02-05');

INSERT INTO "Clinic1".payment (p\_id, p\_sum, p\_date\_opened, p\_date\_closed) VALUES (3, 500, '2020-02-02', '2020-02-02');

INSERT INTO "Clinic1".payment (p\_id, p\_sum, p\_date\_opened, p\_date\_closed) VALUES (4, 1000, '2020-02-03', '2020-02-05');

INSERT INTO "Clinic1".payment (p\_id, p\_sum, p\_date\_opened, p\_date\_closed) VALUES (6, 600, '2020-02-05', '2020-02-12');

INSERT INTO "Clinic1".payment (p\_id, p\_sum, p\_date\_opened, p\_date\_closed) VALUES (7, 3000, '2020-02-05', '2020-03-01');

INSERT INTO "Clinic1".payment (p\_id, p\_sum, p\_date\_opened, p\_date\_closed) VALUES (5, 3000, '2020-02-04', '2020-02-15');

INSERT INTO "Clinic1".payment (p\_id, p\_sum, p\_date\_opened, p\_date\_closed) VALUES (8, 1000, '2020-02-06', NULL);

--

-- TOC entry 2701 (class 2606 OID 25117)

-- Name: appointment a\_payment; Type: CONSTRAINT; Schema: Clinic1; Owner: postgres

--

ALTER TABLE ONLY "Clinic1".appointment

ADD CONSTRAINT a\_payment UNIQUE (a\_payment);

--

-- TOC entry 2703 (class 2606 OID 25115)

-- Name: appointment appointment\_pkey; Type: CONSTRAINT; Schema: Clinic1; Owner: postgres

--

ALTER TABLE ONLY "Clinic1".appointment

ADD CONSTRAINT appointment\_pkey PRIMARY KEY (a\_id);

--

-- TOC entry 2697 (class 2606 OID 25033)

-- Name: cabinet cabinet\_pkey; Type: CONSTRAINT; Schema: Clinic1; Owner: postgres

--

ALTER TABLE ONLY "Clinic1".cabinet

ADD CONSTRAINT cabinet\_pkey PRIMARY KEY (c\_number);

--

-- TOC entry 2699 (class 2606 OID 25102)

-- Name: d\_schedule d\_schedule\_pkey; Type: CONSTRAINT; Schema: Clinic1; Owner: postgres

--

ALTER TABLE ONLY "Clinic1".d\_schedule

ADD CONSTRAINT d\_schedule\_pkey PRIMARY KEY (doctor);

--

-- TOC entry 2695 (class 2606 OID 25028)

-- Name: doctor doctor\_pkey; Type: CONSTRAINT; Schema: Clinic1; Owner: postgres

--

ALTER TABLE ONLY "Clinic1".doctor

ADD CONSTRAINT doctor\_pkey PRIMARY KEY (d\_id);

--

-- TOC entry 2693 (class 2606 OID 25020)

-- Name: medical\_card patient\_pkey; Type: CONSTRAINT; Schema: Clinic1; Owner: postgres

--

ALTER TABLE ONLY "Clinic1".medical\_card

ADD CONSTRAINT patient\_pkey PRIMARY KEY (mc\_id);

--

-- TOC entry 2705 (class 2606 OID 25137)

-- Name: payment payment\_pkey; Type: CONSTRAINT; Schema: Clinic1; Owner: postgres

--

ALTER TABLE ONLY "Clinic1".payment

ADD CONSTRAINT payment\_pkey PRIMARY KEY (p\_id);

--

-- TOC entry 2709 (class 2606 OID 25128)

-- Name: appointment a\_cabinte\_fkey; Type: FK CONSTRAINT; Schema: Clinic1; Owner: postgres

--

ALTER TABLE ONLY "Clinic1".appointment

ADD CONSTRAINT a\_cabinte\_fkey FOREIGN KEY (a\_cabinet) REFERENCES "Clinic1".cabinet(c\_number);

--

-- TOC entry 2708 (class 2606 OID 25123)

-- Name: appointment a\_doctor\_fkey; Type: FK CONSTRAINT; Schema: Clinic1; Owner: postgres

--

ALTER TABLE ONLY "Clinic1".appointment

ADD CONSTRAINT a\_doctor\_fkey FOREIGN KEY (a\_doctor) REFERENCES "Clinic1".doctor(d\_id);

--

-- TOC entry 2707 (class 2606 OID 25118)

-- Name: appointment a\_patient\_fkey; Type: FK CONSTRAINT; Schema: Clinic1; Owner: postgres

--

ALTER TABLE ONLY "Clinic1".appointment

ADD CONSTRAINT a\_patient\_fkey FOREIGN KEY (a\_patient) REFERENCES "Clinic1".medical\_card(mc\_id);

--

-- TOC entry 2706 (class 2606 OID 25103)

-- Name: d\_schedule doctor\_fkey; Type: FK CONSTRAINT; Schema: Clinic1; Owner: postgres

--

ALTER TABLE ONLY "Clinic1".d\_schedule

ADD CONSTRAINT doctor\_fkey FOREIGN KEY (doctor) REFERENCES "Clinic1".doctor(d\_id) NOT VALID;

--

-- TOC entry 2710 (class 2606 OID 25138)

-- Name: payment p\_id\_fkey; Type: FK CONSTRAINT; Schema: Clinic1; Owner: postgres

--

ALTER TABLE ONLY "Clinic1".payment

ADD CONSTRAINT p\_id\_fkey FOREIGN KEY (p\_id) REFERENCES "Clinic1".appointment(a\_payment);

-- Completed on 2020-10-28 02:48:08

--

-- PostgreSQL database dump complete

--

# ВЫВОД

Вывод: в ходе выполнения лабораторной работы №4 было получены практические навыки создания таблиц базы данных PostgreSQL 12, заполнения их рабочими данными, резервного копирования и восстановления баз данных.