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

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«_____»_____2020г.

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1 ХОД РАБОТЫ

1.1 ЦЕЛЬ РАБОТЫ

Овладеть практическими навыками создания базы данных в PostgreSQL.

1.2 ИНДИВИДУАЛЬНОЕ ЗАДАНИЕ

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

2 ВЫПОЛНЕНИЕ

2.1. 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.

2.2. SQL КОД

```
--
-- PostgreSQL database dump
--

-- Dumped from database version 11.9
-- Dumped by pg_dump version 11.9

-- Started on 2020-11-03 14:04:30

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 SESSION AUTHORIZATION 'postgres';

DROP DATABASE "clinic";
--
-- TOC entry 2858 (class 1262 OID 16393)
```

```
-- Name: clinic; Type: DATABASE; Schema: -; Owner: postgres
--

CREATE DATABASE "clinic" WITH TEMPLATE = template0 ENCODING = 'UTF8'
LC_COLLATE = 'Russian_Russia.1251' LC_CTYPE = 'Russian_Russia.1251';


\connect "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;

SET SESSION AUTHORIZATION 'postgres';

--
-- TOC entry 2859 (class 0 OID 0)
-- Dependencies: 2858
-- Name: DATABASE "clinic"; Type: COMMENT; Schema: -; Owner: postgres
--

COMMENT ON DATABASE "clinic" IS 'A database of a private clinic. Tells
about doctors, patients, cabinets, appointments, payments, doctor''s
schedule.';


--
-- TOC entry 6 (class 2615 OID 16394)
-- Name: clinic; Type: SCHEMA; Schema: -; Owner: postgres
--

CREATE SCHEMA "clinic";


--
-- TOC entry 2860 (class 0 OID 0)
-- Dependencies: 6
-- Name: SCHEMA "clinic"; Type: COMMENT; Schema: -; Owner: postgres
--

COMMENT ON SCHEMA "clinic" IS 'A database of a private clinic. Tells about
doctors, patients, cabinets, appointments, payments, doctor''s schedule.';


SET default_tablespace = '';

SET default_with_oids = false;

--
-- TOC entry 198 (class 1259 OID 16403)
-- Name: appointment; Type: TABLE; Schema: clinic; Owner: postgres
--

CREATE TABLE "clinic"."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"
);


--
-- TOC entry 2862 (class 0 OID 0)
-- Dependencies: 198
-- Name: TABLE "appointment"; Type: COMMENT; Schema: clinic; Owner:
postgres
--

COMMENT ON TABLE "clinic"."appointment" IS 'A table for all of the
appontments.';


--
-- TOC entry 199 (class 1259 OID 16411)
-- Name: cabinet; Type: TABLE; Schema: clinic; Owner: postgres
--

CREATE TABLE "clinic"."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
);


--
-- TOC entry 2863 (class 0 OID 0)
-- Dependencies: 199
-- Name: TABLE "cabinet"; Type: COMMENT; Schema: clinic; Owner: postgres
--

COMMENT ON TABLE "clinic"."cabinet" IS 'A table for all the things cabinet
related.';


--
-- TOC entry 197 (class 1259 OID 16395)
-- Name: doctor; Type: TABLE; Schema: clinic; Owner: postgres
--

CREATE TABLE "clinic"."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
);
```

```
--
-- TOC entry 2864 (class 0 OID 0)
-- Dependencies: 197
-- Name: TABLE "doctor"; Type: COMMENT; Schema: clinic; Owner: postgres
--

COMMENT ON TABLE "clinic"."doctor" IS 'Information about the clinic''s
doctors.';


--
-- TOC entry 200 (class 1259 OID 16416)
-- Name: medical_card; Type: TABLE; Schema: clinic; Owner: postgres
--

CREATE TABLE "clinic"."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
);


--
-- TOC entry 2865 (class 0 OID 0)
-- Dependencies: 200
-- Name: TABLE "medical_card"; Type: COMMENT; Schema: clinic; Owner:
postgres
--

COMMENT ON TABLE "clinic"."medical_card" IS 'Info about the patient in the
medical card.';


--
-- TOC entry 201 (class 1259 OID 16424)
-- Name: payment; Type: TABLE; Schema: clinic; Owner: postgres
--

CREATE TABLE "clinic"."payment" (
    "p_id" integer NOT NULL,
    "p_sum" integer NOT NULL,
    "p_date_opened" "date" NOT NULL,
    "p_date_closed" "date"
);


--
-- TOC entry 202 (class 1259 OID 16429)
-- Name: schedule; Type: TABLE; Schema: clinic; Owner: postgres
--

CREATE TABLE "clinic"."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 without time zone,
    "doctor" integer NOT NULL
);


--
-- TOC entry 2866 (class 0 OID 0)
-- Dependencies: 202
-- Name: TABLE "schedule"; Type: COMMENT; Schema: clinic; Owner: postgres
--

COMMENT ON TABLE "clinic"."schedule" IS 'Doctor''s shedule.';


--
-- TOC entry 2848 (class 0 OID 16403)
-- Dependencies: 198
-- Data for Name: appointment; Type: TABLE DATA; Schema: clinic; Owner:
postgres
--

INSERT INTO "clinic"."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 "clinic"."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 "clinic"."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 "clinic"."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 "clinic"."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 "clinic"."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 "clinic"."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 "clinic"."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 2849 (class 0 OID 16411)
-- Dependencies: 199
-- Data for Name: cabinet; Type: TABLE DATA; Schema: clinic; Owner:
postgres
--

INSERT INTO "clinic"."cabinet" ("c_number", "c_wt_start", "c_wt_end",
"c_phone_num") VALUES (1, '10:30:00', '17:45:00', 1111111);
INSERT INTO "clinic"."cabinet" ("c_number", "c_wt_start", "c_wt_end",
"c_phone_num") VALUES (2, '08:00:00', '20:45:00', 2222222);
INSERT INTO "clinic"."cabinet" ("c_number", "c_wt_start", "c_wt_end",
"c_phone_num") VALUES (3, '09:15:00', '20:45:00', 3333333);
INSERT INTO "clinic"."cabinet" ("c_number", "c_wt_start", "c_wt_end",
"c_phone_num") VALUES (4, '11:30:00', '18:45:00', 4444444);
INSERT INTO "clinic"."cabinet" ("c_number", "c_wt_start", "c_wt_end",
"c_phone_num") VALUES (5, '09:15:00', '20:45:00', 5555555);
INSERT INTO "clinic"."cabinet" ("c_number", "c_wt_start", "c_wt_end",
"c_phone_num") VALUES (6, '11:30:00', '18:45:00', 6666666);
INSERT INTO "clinic"."cabinet" ("c_number", "c_wt_start", "c_wt_end",
"c_phone_num") VALUES (7, '09:15:00', '20:45:00', 7777777);
INSERT INTO "clinic"."cabinet" ("c_number", "c_wt_start", "c_wt_end",
"c_phone_num") VALUES (8, '11:30:00', '18:45:00', 8888888);


--
-- TOC entry 2847 (class 0 OID 16395)
-- Dependencies: 197
-- Data for Name: doctor; Type: TABLE DATA; Schema: clinic; Owner:
postgres
--

INSERT INTO "clinic"."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 "clinic"."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 "clinic"."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 "clinic"."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 "clinic"."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 "clinic"."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 "clinic"."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 "clinic"."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 2850 (class 0 OID 16416)
-- Dependencies: 200
-- Data for Name: medical_card; Type: TABLE DATA; Schema: clinic; Owner:
postgres
--

INSERT INTO "clinic"."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 "clinic"."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 "clinic"."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 "clinic"."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 "clinic"."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 "clinic"."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);
INSERT INTO "clinic"."medical_card" ("mc_id", "mc_full_name", "mc_gender",
"mc_dob", "mc_address", "mc_phone_num") VALUES (5, 'Patient 5', false,
'1988-12-20', 'Street 10 home 1 flat 1', 1532727);
INSERT INTO "clinic"."medical_card" ("mc_id", "mc_full_name", "mc_gender",
"mc_dob", "mc_address", "mc_phone_num") VALUES (3, 'Patient 3', false,
'1969-01-01', 'Street 3 home 1 flat 1', 1532234);


--
-- TOC entry 2851 (class 0 OID 16424)
-- Dependencies: 201
-- Data for Name: payment; Type: TABLE DATA; Schema: clinic; Owner:
postgres
--

INSERT INTO "clinic"."payment" ("p_id", "p_sum", "p_date_opened",
"p_date_closed") VALUES (1, 1000, '2020-02-01', '2020-02-01');
INSERT INTO "clinic"."payment" ("p_id", "p_sum", "p_date_opened",
"p_date_closed") VALUES (2, 3000, '2020-02-02', '2020-02-05');
INSERT INTO "clinic"."payment" ("p_id", "p_sum", "p_date_opened",
"p_date_closed") VALUES (3, 500, '2020-02-02', '2020-02-02');
INSERT INTO "clinic"."payment" ("p_id", "p_sum", "p_date_opened",
"p_date_closed") VALUES (4, 1000, '2020-02-03', '2020-02-05');
INSERT INTO "clinic"."payment" ("p_id", "p_sum", "p_date_opened",
"p_date_closed") VALUES (6, 600, '2020-02-05', '2020-02-12');
INSERT INTO "clinic"."payment" ("p_id", "p_sum", "p_date_opened",
"p_date_closed") VALUES (7, 3000, '2020-02-05', '2020-03-01');
INSERT INTO "clinic"."payment" ("p_id", "p_sum", "p_date_opened",
"p_date_closed") VALUES (5, 3000, '2020-02-04', '2020-02-15');
INSERT INTO "clinic"."payment" ("p_id", "p_sum", "p_date_opened",
"p_date_closed") VALUES (8, 1000, '2020-02-06', NULL);
```

```
--
-- TOC entry 2852 (class 0 OID 16429)
-- Dependencies: 202
-- Data for Name: schedule; Type: TABLE DATA; Schema: clinic; Owner:
postgres
--

INSERT INTO "clinic"."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 "clinic"."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 "clinic"."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 "clinic"."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 "clinic"."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 "clinic"."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 "clinic"."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 "clinic"."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 2710 (class 2606 OID 16410)
-- Name: appointment appointment_pkey; Type: CONSTRAINT; Schema: clinic;
Owner: postgres
--

ALTER TABLE ONLY "clinic"."appointment"
```

```
    ADD CONSTRAINT "appointment_pkey" PRIMARY KEY ("a_id");


--
-- TOC entry 2714 (class 2606 OID 16415)
-- Name: cabinet cabinet_pkey; Type: CONSTRAINT; Schema: clinic; Owner:
postgres
--

ALTER TABLE ONLY "clinic"."cabinet"
    ADD CONSTRAINT "cabinet_pkey" PRIMARY KEY ("c_number");


--
-- TOC entry 2708 (class 2606 OID 16402)
-- Name: doctor doctor_pkey; Type: CONSTRAINT; Schema: clinic; Owner:
postgres
--

ALTER TABLE ONLY "clinic"."doctor"
    ADD CONSTRAINT "doctor_pkey" PRIMARY KEY ("d_id");


--
-- TOC entry 2716 (class 2606 OID 16423)
-- Name: medical_card medical_card_pkey; Type: CONSTRAINT; Schema: clinic;
Owner: postgres
--

ALTER TABLE ONLY "clinic"."medical_card"
    ADD CONSTRAINT "medical_card_pkey" PRIMARY KEY ("mc_id");


--
-- TOC entry 2718 (class 2606 OID 16428)
-- Name: payment payment_pkey; Type: CONSTRAINT; Schema: clinic; Owner:
postgres
--

ALTER TABLE ONLY "clinic"."payment"
    ADD CONSTRAINT "payment_pkey" PRIMARY KEY ("p_id");


--
-- TOC entry 2712 (class 2606 OID 16455)
-- Name: appointment payment_unique; Type: CONSTRAINT; Schema: clinic;
Owner: postgres
--

ALTER TABLE ONLY "clinic"."appointment"
    ADD CONSTRAINT "payment_unique" UNIQUE ("a_payment");


--
-- TOC entry 2720 (class 2606 OID 16433)
-- Name: schedule schedule_pkey; Type: CONSTRAINT; Schema: clinic; Owner:
postgres
--

ALTER TABLE ONLY "clinic"."schedule"
    ADD CONSTRAINT "schedule_pkey" PRIMARY KEY ("doctor");
```

```
--
-- TOC entry 2723 (class 2606 OID 16444)
-- Name: appointment a_cabinet_fkey; Type: FK CONSTRAINT; Schema: clinic;
Owner: postgres
--

ALTER TABLE ONLY "clinic"."appointment"
    ADD CONSTRAINT "a_cabinet_fkey" FOREIGN KEY ("a_cabinet") REFERENCES
"clinic"."cabinet"("c_number") NOT VALID;


--
-- TOC entry 2721 (class 2606 OID 16434)
-- Name: appointment a_doctor_fkey; Type: FK CONSTRAINT; Schema: clinic;
Owner: postgres
--

ALTER TABLE ONLY "clinic"."appointment"
    ADD CONSTRAINT "a_doctor_fkey" FOREIGN KEY ("a_doctor") REFERENCES
"clinic"."doctor"("d_id") NOT VALID;


--
-- TOC entry 2722 (class 2606 OID 16439)
-- Name: appointment a_patient_fkey; Type: FK CONSTRAINT; Schema: clinic;
Owner: postgres
--

ALTER TABLE ONLY "clinic"."appointment"
    ADD CONSTRAINT "a_patient_fkey" FOREIGN KEY ("a_patient") REFERENCES
"clinic"."medical_card"("mc_id") NOT VALID;


--
-- TOC entry 2725 (class 2606 OID 16449)
-- Name: schedule doctor_fkey; Type: FK CONSTRAINT; Schema: clinic; Owner:
postgres
--

ALTER TABLE ONLY "clinic"."schedule"
    ADD CONSTRAINT "doctor_fkey" FOREIGN KEY ("doctor") REFERENCES
"clinic"."doctor"("d_id") NOT VALID;


--
-- TOC entry 2724 (class 2606 OID 16456)
-- Name: payment p_id_fkey; Type: FK CONSTRAINT; Schema: clinic; Owner:
postgres
--

ALTER TABLE ONLY "clinic"."payment"
    ADD CONSTRAINT "p_id_fkey" FOREIGN KEY ("p_id") REFERENCES
"clinic"."appointment"("a_payment") NOT VALID;


--
-- TOC entry 2861 (class 0 OID 0)
-- Dependencies: 6
-- Name: SCHEMA "clinic"; Type: ACL; Schema: -; Owner: postgres
--
```

```
GRANT ALL ON SCHEMA "clinic" TO PUBLIC;


-- Completed on 2020-11-03 14:04:31

--
-- PostgreSQL database dump complete
--
```

3 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.