Министерство науки и высшего образования Российской Федерации

Федеральное государственное автономное образовательное учреждение
высшего образования
«Национальный исследовательский университет ИТМО»

Факультет инфокоммуникационных технологий

Отчет по лабораторной работе №1.2 «СОЗДАНИЕ ТАБЛИЦ БАЗЫ ДАННЫХ POSTGRESQL. ЗАПОЛНЕНИЕ ТАБЛИЦ РАБОЧИМИ ДАННЫМИ»

по дисциплине: «Проектирование и реализация баз данных»

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Цель работы: овладеть практическими навыками создания таблиц базы данных PostgreSQL 1X, заполнения их рабочими данными, резервного копирования и восстановления БД.

Оборудование: компьютерный класс.

Программное обеспечение: СУБД PostgreSQL 1X, pgAdmin 4.

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.*
7. Восстановить БД.

Выполнение:

I. **Наименование БД:** «Служба заказа такси»
II. **Схема логической модели базы данных, сгенерированная в Generate ERD:**

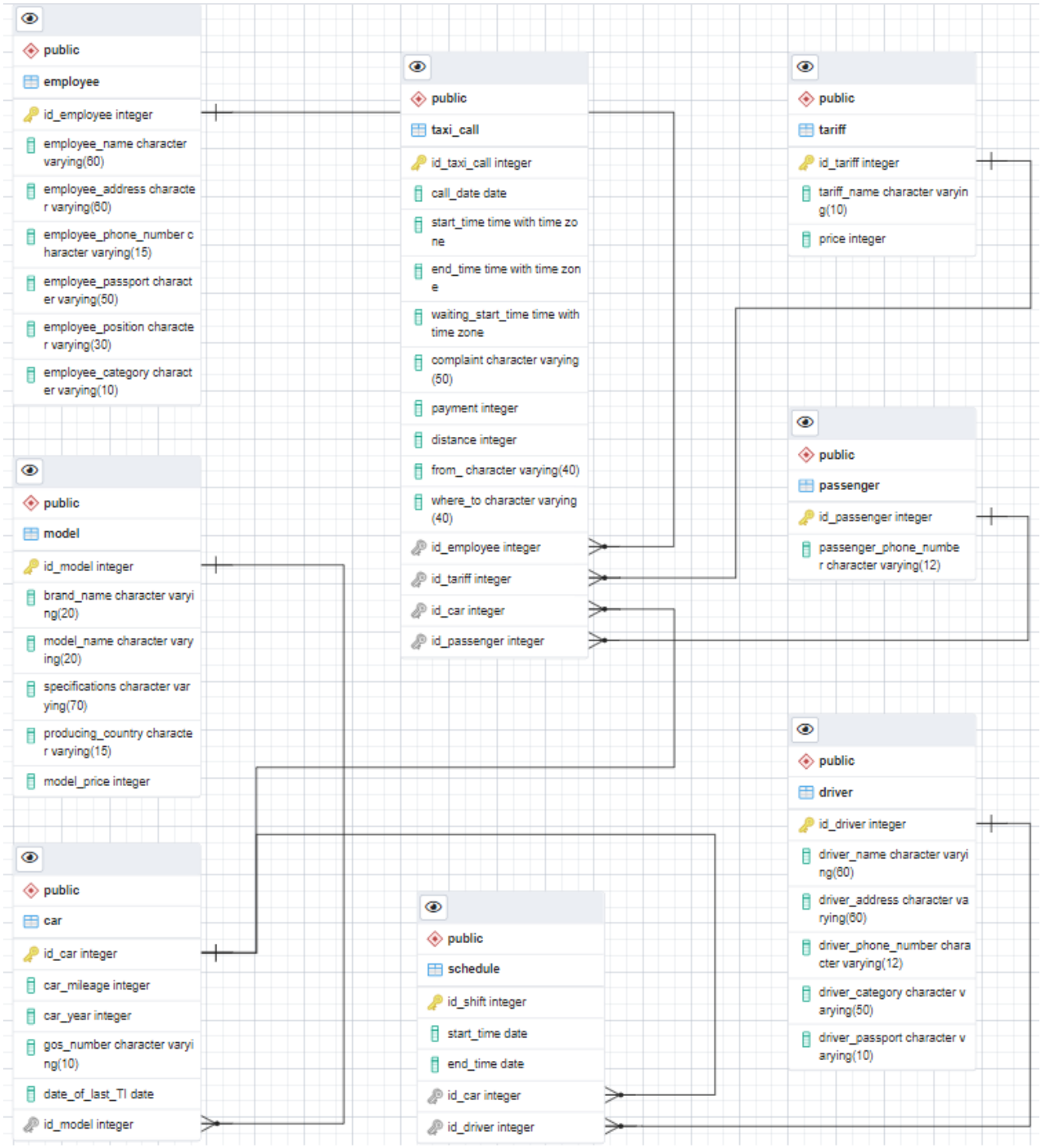

Рис. 1 - Схема логической модели базы данных

III. Dump, содержащий скрипты работы с БД.

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

-- Dumped from database version 12.10
-- Dumped by pg_dump version 13.4

-- Started on 2022-03-02 04:14:57


-- Создание базы данных taxi_db

CREATE DATABASE taxi_db WITH TEMPLATE = template0 ENCODING = 'UTF8' LOCALE =
'Russian_Russia.1251';


ALTER DATABASE taxi_db OWNER TO postgres;

\connect taxi_db

-- Установка значений по умолчанию

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 206 (class 1259 OID 16414)
-- Name: car; Type: TABLE; Schema: public; Owner: postgres
--

-- Создание таблицы “car” и добавление ограничения Check

CREATE TABLE public.car (
    id_car integer NOT NULL,
    car_mileage integer NOT NULL,
    car_year integer NOT NULL,
    gos_number character varying(10) NOT NULL,
    "date_of_last_TI" date NOT NULL,
    id_model integer NOT NULL,
    CONSTRAINT car_mileage_check CHECK ((car_mileage > 0))
);


ALTER TABLE public.car OWNER TO postgres;

--
-- TOC entry 216 (class 1259 OID 16568)
```

```
-- Name: car_id_car_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--

-- Создание последовательности для таблицы “car”

ALTER TABLE public.car ALTER COLUMN id_car ADD GENERATED ALWAYS AS IDENTITY (
    SEQUENCE NAME public.car_id_car_seq
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    MAXVALUE 100000
    CACHE 1
);


--
-- TOC entry 208 (class 1259 OID 16424)
-- Name: driver; Type: TABLE; Schema: public; Owner: postgres
--

-- Создание таблицы “driver” и добавление ограничения Check

CREATE TABLE public.driver (
    id_driver integer NOT NULL,
    driver_name character varying(60) NOT NULL,
    driver_address character varying(60) NOT NULL,
    driver_phone_number character varying(12) NOT NULL,
    driver_category character varying(50) NOT NULL,
    driver_passport character varying(10) NOT NULL,
    CONSTRAINT driver_category_check CHECK (((driver_category)::text = ANY
(ARRAY['B'::text, 'BE'::text, 'C'::text, 'D'::text])))
);


ALTER TABLE public.driver OWNER TO postgres;

--
-- TOC entry 217 (class 1259 OID 16570)
-- Name: driver_id_driver_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--

-- Создание последовательности для таблицы “driver”

ALTER TABLE public.driver ALTER COLUMN id_driver ADD GENERATED ALWAYS AS IDENTITY (
    SEQUENCE NAME public.driver_id_driver_seq
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    MAXVALUE 100000
    CACHE 1
);


--
-- TOC entry 204 (class 1259 OID 16404)
-- Name: employee; Type: TABLE; Schema: public; Owner: postgres
--
```

```
-- Создание таблицы “employee” и добавление ограничения Check

CREATE TABLE public.employee (
    id_employee integer NOT NULL,
    employee_name character varying(60) NOT NULL,
    employee_address character varying(60) NOT NULL,
    employee_phone_number character varying(15) NOT NULL,
    employee_passport character varying(50) NOT NULL,
    employee_position character varying(30) NOT NULL,
    employee_category character varying(10) NOT NULL,
    CONSTRAINT employee_category_check CHECK (((employee_category)::text = ANY
(ARRAY['full-time'::text, 'part-time'::text, 'seasonal'::text, 'temporary'::text])))
);


ALTER TABLE public.employee OWNER TO postgres;

--
-- TOC entry 211 (class 1259 OID 16461)
-- Name: employee_id_employee_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--

-- Создание последовательности для таблицы “employee”

ALTER TABLE public.employee ALTER COLUMN id_employee ADD GENERATED ALWAYS AS IDENTITY
(
    SEQUENCE NAME public.employee_id_employee_seq
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    MAXVALUE 100000
    CACHE 1
);

--
-- TOC entry 205 (class 1259 OID 16409)
-- Name: model; Type: TABLE; Schema: public; Owner: postgres
--

-- Создание таблицы “model” и добавление ограничения Check

CREATE TABLE public.model (
    id_model integer NOT NULL,
    brand_name character varying(20) NOT NULL,
    model_name character varying(20) NOT NULL,
    specifications character varying(70) NOT NULL,
    producing_country character varying(15) NOT NULL,
    model_price integer NOT NULL,
    CONSTRAINT model_price_check CHECK ((model_price > 0)),
    CONSTRAINT producing_country_check CHECK (((producing_country)::text = ANY
(ARRAY['Argentina'::text, 'China'::text, 'France'::text, 'Germany'::text,
'Japan'::text, 'Spain'::text, 'United States'::text])))
);


ALTER TABLE public.model OWNER TO postgres;

--
-- TOC entry 212 (class 1259 OID 16466)
-- Name: model_id_model_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--
```

```
-- Создание последовательности для таблицы “model”

ALTER TABLE public.model ALTER COLUMN id_model ADD GENERATED ALWAYS AS IDENTITY (
    SEQUENCE NAME public.model_id_model_seq
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    MAXVALUE 100000
    CACHE 1
);


--
-- TOC entry 202 (class 1259 OID 16394)
-- Name: passenger; Type: TABLE; Schema: public; Owner: postgres
--

-- Создание таблицы “passenger”

CREATE TABLE public.passenger (
    id_passenger integer NOT NULL,
    passenger_phone_number character varying(12) NOT NULL
);


ALTER TABLE public.passenger OWNER TO postgres;

--
-- TOC entry 215 (class 1259 OID 16558)
-- Name: passenger_id_passenger_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--

-- Создание последовательности для таблицы “passenger”

ALTER TABLE public.passenger ALTER COLUMN id_passenger ADD GENERATED ALWAYS AS
IDENTITY (
    SEQUENCE NAME public.passenger_id_passenger_seq
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    MAXVALUE 100000000
    CACHE 1
);


--
-- TOC entry 207 (class 1259 OID 16419)
-- Name: schedule; Type: TABLE; Schema: public; Owner: postgres
--

-- Создание таблицы “schedule” и добавление ограничения Check

CREATE TABLE public.schedule (
    id_shift integer NOT NULL,
    start_time date NOT NULL,
    end_time date NOT NULL,
    id_car integer NOT NULL,
    id_driver integer NOT NULL,
    CONSTRAINT end_time_check CHECK ((end_time >= start_time))
);
```

```
ALTER TABLE public.schedule OWNER TO postgres;

--
-- TOC entry 210 (class 1259 OID 16459)
-- Name: schedule_id_shift_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--

-- Создание последовательности для таблицы “schedule”

ALTER TABLE public.schedule ALTER COLUMN id_shift ADD GENERATED BY DEFAULT AS
IDENTITY (
    SEQUENCE NAME public.schedule_id_shift_seq
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    MAXVALUE 100000000
    CACHE 1
);


--
-- TOC entry 203 (class 1259 OID 16399)
-- Name: tariff; Type: TABLE; Schema: public; Owner: postgres
--

-- Создание таблицы “tariff” и добавление ограничения Check

CREATE TABLE public.tariff (
    id_tariff integer NOT NULL,
    tariff_name character varying(10) NOT NULL,
    price integer NOT NULL,
    CONSTRAINT price_check CHECK ((price > 0))
);


ALTER TABLE public.tariff OWNER TO postgres;

--
-- TOC entry 213 (class 1259 OID 16471)
-- Name: tariff_id_tariff_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--

-- Создание последовательности для таблицы “tariff”

ALTER TABLE public.tariff ALTER COLUMN id_tariff ADD GENERATED ALWAYS AS IDENTITY (
    SEQUENCE NAME public.tariff_id_tariff_seq
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    MAXVALUE 1000
    CACHE 1
);


--
-- TOC entry 209 (class 1259 OID 16429)
-- Name: taxi_call; Type: TABLE; Schema: public; Owner: postgres
--
```

```
-- Создание таблицы “taxi_call” и добавление ограничения Check

CREATE TABLE public.taxi_call (
    id_taxi_call integer NOT NULL,
    call_date date NOT NULL,
    start_time time with time zone NOT NULL,
    end_time time with time zone NOT NULL,
    waiting_start_time time with time zone NOT NULL,
    complaint character varying(50),
    payment integer NOT NULL,
    distance integer NOT NULL,
    from_ character varying(40) NOT NULL,
    where_to character varying(40) NOT NULL,
    id_employee integer NOT NULL,
    id_tariff integer NOT NULL,
    id_car integer NOT NULL,
    id_passenger integer NOT NULL,
    CONSTRAINT distance_check CHECK ((distance > 0)),
    CONSTRAINT end_timee_check CHECK ((end_time >= start_time)),
    CONSTRAINT payment_check CHECK ((payment >= 0)),
    CONSTRAINT start_time_check CHECK ((start_time >= waiting_start_time))
);


ALTER TABLE public.taxi_call OWNER TO postgres;

--
-- TOC entry 214 (class 1259 OID 16474)
-- Name: taxi_call_id_taxi_call_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--

-- Создание последовательности для таблицы “taxi_call”

ALTER TABLE public.taxi_call ALTER COLUMN id_taxi_call ADD GENERATED ALWAYS AS
IDENTITY (
    SEQUENCE NAME public.taxi_call_id_taxi_call_seq
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    MAXVALUE 100000000
    CACHE 1
);


--
-- TOC entry 2899 (class 0 OID 16414)
-- Dependencies: 206
-- Data for Name: car; Type: TABLE DATA; Schema: public; Owner: postgres
--

-- Заполнение таблицы “car” рабочими данными

INSERT INTO public.car (id_car, car_mileage, car_year, gos_number, "date_of_last_TI",
id_model) OVERRIDING SYSTEM VALUE VALUES (1, 4324, 2018, 'k981as', '2022-01-10', 1);
INSERT INTO public.car (id_car, car_mileage, car_year, gos_number, "date_of_last_TI",
id_model) OVERRIDING SYSTEM VALUE VALUES (2, 835, 2020, 'c165cc', '2021-12-26', 4);
INSERT INTO public.car (id_car, car_mileage, car_year, gos_number, "date_of_last_TI",
id_model) OVERRIDING SYSTEM VALUE VALUES (3, 3767, 2019, 'w580ee', '2022-01-08', 2);
INSERT INTO public.car (id_car, car_mileage, car_year, gos_number, "date_of_last_TI",
id_model) OVERRIDING SYSTEM VALUE VALUES (4, 663, 2021, 'l396kc', '2021-11-30', 3);
INSERT INTO public.car (id_car, car_mileage, car_year, gos_number, "date_of_last_TI",
id_model) OVERRIDING SYSTEM VALUE VALUES (5, 2884, 2019, 'm266qw', '2022-01-18', 2);
```

```
INSERT INTO public.car (id_car, car_mileage, car_year, gos_number, "date_of_last_TI",
id_model) OVERRIDING SYSTEM VALUE VALUES (12, 4324, 2018, 'q981as', '2022-01-10', 1);
INSERT INTO public.car (id_car, car_mileage, car_year, gos_number, "date_of_last_TI",
id_model) OVERRIDING SYSTEM VALUE VALUES (13, 835, 2020, 'k165cc', '2021-12-26', 4);
INSERT INTO public.car (id_car, car_mileage, car_year, gos_number, "date_of_last_TI",
id_model) OVERRIDING SYSTEM VALUE VALUES (14, 3767, 2019, 'c580ee', '2022-01-08', 2);
INSERT INTO public.car (id_car, car_mileage, car_year, gos_number, "date_of_last_TI",
id_model) OVERRIDING SYSTEM VALUE VALUES (15, 663, 2021, 'w396kc', '2021-11-30', 3);
INSERT INTO public.car (id_car, car_mileage, car_year, gos_number, "date_of_last_TI",
id_model) OVERRIDING SYSTEM VALUE VALUES (16, 2884, 2019, 'd266qw', '2022-01-18', 2);


--
-- TOC entry 2901 (class 0 OID 16424)
-- Dependencies: 208
-- Data for Name: driver; Type: TABLE DATA; Schema: public; Owner: postgres
--

-- Заполнение таблицы “driver” рабочими данными

INSERT INTO public.driver (id_driver, driver_name, driver_address,
driver_phone_number, driver_category, driver_passport) OVERRIDING SYSTEM VALUE VALUES
(5, 'Kalinin Pavel', 'Lomonosova 22', '+79022042768', 'B', '9810897652');
INSERT INTO public.driver (id_driver, driver_name, driver_address,
driver_phone_number, driver_category, driver_passport) OVERRIDING SYSTEM VALUE VALUES
(6, 'Balandina Alina', 'Belarusskaya 6', '+79168816475', 'C', '9808278270');
INSERT INTO public.driver (id_driver, driver_name, driver_address,
driver_phone_number, driver_category, driver_passport) OVERRIDING SYSTEM VALUE VALUES
(7, 'Balabanov Viktor', 'Nevsky Avenue 40', '+79847229743', 'B', '9814504853');
INSERT INTO public.driver (id_driver, driver_name, driver_address,
driver_phone_number, driver_category, driver_passport) OVERRIDING SYSTEM VALUE VALUES
(8, 'Fokin Anton', 'Kirichnaya 21 ', '+79202521556', 'BE', '9820374048');


--
-- TOC entry 2897 (class 0 OID 16404)
-- Dependencies: 204
-- Data for Name: employee; Type: TABLE DATA; Schema: public; Owner: postgres
--

-- Заполнение таблицы “employee” рабочими данными

INSERT INTO public.employee (id_employee, employee_name, employee_address,
employee_phone_number, employee_passport, employee_position, employee_category)
OVERRIDING SYSTEM VALUE VALUES (2, 'Larionova Faina', 'Suvorovskiy Avenue 26',
'+79872016475', '9814278270', 'manager', 'full-time');
INSERT INTO public.employee (id_employee, employee_name, employee_address,
employee_phone_number, employee_passport, employee_position, employee_category)
OVERRIDING SYSTEM VALUE VALUES (3, 'Kudryavtsev Kirill', 'Chkalovskiy Avenue 32',
'+79045124896', '9811953285', 'software engineer', 'part-time');
INSERT INTO public.employee (id_employee, employee_name, employee_address,
employee_phone_number, employee_passport, employee_position, employee_category)
OVERRIDING SYSTEM VALUE VALUES (4, 'Maltseva Yulia', 'Beloostrovskaya 10',
'+79281255732', '9812456642', 'dispatcher', 'seasonal');


--
-- TOC entry 2898 (class 0 OID 16409)
-- Dependencies: 205
-- Data for Name: model; Type: TABLE DATA; Schema: public; Owner: postgres
--
```

```
-- Заполнение таблицы “model” рабочими данными

INSERT INTO public.model (id_model, brand_name, model_name, specifications,
producing_country, model_price) OVERRIDING SYSTEM VALUE VALUES (1, 'Ford', 'Falcon',
'some text', 'United States', 10000000);
INSERT INTO public.model (id_model, brand_name, model_name, specifications,
producing_country, model_price) OVERRIDING SYSTEM VALUE VALUES (2, 'Honda', 'CR-V',
'some text', 'Japan', 8000000);
INSERT INTO public.model (id_model, brand_name, model_name, specifications,
producing_country, model_price) OVERRIDING SYSTEM VALUE VALUES (3, 'BMW', '4 Series',
'some text', 'Germany', 12000000);
INSERT INTO public.model (id_model, brand_name, model_name, specifications,
producing_country, model_price) OVERRIDING SYSTEM VALUE VALUES (4, 'Chevrolet',
'Camaro', 'some text', 'United States', 8000000);


--
-- TOC entry 2895 (class 0 OID 16394)
-- Dependencies: 202
-- Data for Name: passenger; Type: TABLE DATA; Schema: public; Owner: postgres
--

-- Заполнение таблицы “passenger” рабочими данными

INSERT INTO public.passenger (id_passenger, passenger_phone_number) OVERRIDING SYSTEM
VALUE VALUES (13, '+79342045795');
INSERT INTO public.passenger (id_passenger, passenger_phone_number) OVERRIDING SYSTEM
VALUE VALUES (14, '+79045536872');
INSERT INTO public.passenger (id_passenger, passenger_phone_number) OVERRIDING SYSTEM
VALUE VALUES (15, '+79867438927');
INSERT INTO public.passenger (id_passenger, passenger_phone_number) OVERRIDING SYSTEM
VALUE VALUES (16, '+79869338925');
INSERT INTO public.passenger (id_passenger, passenger_phone_number) OVERRIDING SYSTEM
VALUE VALUES (17, '+79045621642');


--
-- TOC entry 2900 (class 0 OID 16419)
-- Dependencies: 207
-- Data for Name: schedule; Type: TABLE DATA; Schema: public; Owner: postgres
--

-- Заполнение таблицы “schedule” рабочими данными

INSERT INTO public.schedule (id_shift, start_time, end_time, id_car, id_driver)
VALUES (1, '2022-01-20', '2022-01-20', 1, 5);
INSERT INTO public.schedule (id_shift, start_time, end_time, id_car, id_driver)
VALUES (2, '2022-02-12', '2022-02-12', 4, 6);
INSERT INTO public.schedule (id_shift, start_time, end_time, id_car, id_driver)
VALUES (3, '2022-02-25', '2022-02-26', 2, 7);
INSERT INTO public.schedule (id_shift, start_time, end_time, id_car, id_driver)
VALUES (4, '2022-01-30', '2022-01-30', 3, 8);


--
-- TOC entry 2896 (class 0 OID 16399)
-- Dependencies: 203
-- Data for Name: tariff; Type: TABLE DATA; Schema: public; Owner: postgres
--
```

```
-- Заполнение таблицы “tariff” рабочими данными

INSERT INTO public.tariff (id_tariff, tariff_name, price) OVERRIDING SYSTEM VALUE
VALUES (1, 'morning', 100);
INSERT INTO public.tariff (id_tariff, tariff_name, price) OVERRIDING SYSTEM VALUE
VALUES (2, 'day', 80);
INSERT INTO public.tariff (id_tariff, tariff_name, price) OVERRIDING SYSTEM VALUE
VALUES (3, 'night', 120);
INSERT INTO public.tariff (id_tariff, tariff_name, price) OVERRIDING SYSTEM VALUE
VALUES (4, 'rush hour', 140);


--
-- TOC entry 2902 (class 0 OID 16429)
-- Dependencies: 209
-- Data for Name: taxi_call; Type: TABLE DATA; Schema: public; Owner: postgres
--

-- Заполнение таблицы “taxi_call” рабочими данными

INSERT INTO public.taxi_call (id_taxi_call, call_date, start_time, end_time,
waiting_start_time, complaint, payment, distance, from_, where_to, id_employee,
id_tariff, id_car, id_passenger) OVERRIDING SYSTEM VALUE VALUES (1, '2022-01-10',
'12:25:05+03', '12:48:32+03', '12:23:00+03', '', 316, 5600, 'Belorusskaya 6',
'Lomonosova 9', 3, 2, 1, 16);
INSERT INTO public.taxi_call (id_taxi_call, call_date, start_time, end_time,
waiting_start_time, complaint, payment, distance, from_, where_to, id_employee,
id_tariff, id_car, id_passenger) OVERRIDING SYSTEM VALUE VALUES (2, '2022-01-28',
'01:42:11+03', '02:09:30+03', '01:40:00+03', 'some text', 608, 4900, 'Nevsky Avenue
40', 'Kirichnaya 21', 3, 3, 4, 13);
INSERT INTO public.taxi_call (id_taxi_call, call_date, start_time, end_time,
waiting_start_time, complaint, payment, distance, from_, where_to, id_employee,
id_tariff, id_car, id_passenger) OVERRIDING SYSTEM VALUE VALUES (3, '2022-02-22',
'19:20:01+03', '20:35:09+03', '19:17:00+03', '', 544, 6600, 'Kronverskiy Avenue 49',
'Suvorovskiy Avenue 26', 3, 4, 2, 15);


--
-- TOC entry 2917 (class 0 OID 0)
-- Dependencies: 216
-- Name: car_id_car_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres
--

SELECT pg_catalog.setval('public.car_id_car_seq', 16, true);


--
-- TOC entry 2918 (class 0 OID 0)
-- Dependencies: 217
-- Name: driver_id_driver_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres
--

SELECT pg_catalog.setval('public.driver_id_driver_seq', 8, true);


--
-- TOC entry 2919 (class 0 OID 0)
-- Dependencies: 211
-- Name: employee_id_employee_seq; Type: SEQUENCE SET; Schema: public; Owner:
postgres
--
```

```
SELECT pg_catalog.setval('public.employee_id_employee_seq', 4, true);


--
-- TOC entry 2920 (class 0 OID 0)
-- Dependencies: 212
-- Name: model_id_model_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres
--

SELECT pg_catalog.setval('public.model_id_model_seq', 4, true);


--
-- TOC entry 2921 (class 0 OID 0)
-- Dependencies: 215
-- Name: passenger_id_passenger_seq; Type: SEQUENCE SET; Schema: public; Owner:
postgres
--

SELECT pg_catalog.setval('public.passenger_id_passenger_seq', 17, true);


--
-- TOC entry 2922 (class 0 OID 0)
-- Dependencies: 210
-- Name: schedule_id_shift_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres
--

SELECT pg_catalog.setval('public.schedule_id_shift_seq', 4, true);


--
-- TOC entry 2923 (class 0 OID 0)
-- Dependencies: 213
-- Name: tariff_id_tariff_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres
--

SELECT pg_catalog.setval('public.tariff_id_tariff_seq', 4, true);


--
-- TOC entry 2924 (class 0 OID 0)
-- Dependencies: 214
-- Name: taxi_call_id_taxi_call_seq; Type: SEQUENCE SET; Schema: public; Owner:
postgres
--

SELECT pg_catalog.setval('public.taxi_call_id_taxi_call_seq', 3, true);


--
-- TOC entry 2751 (class 2606 OID 16418)
-- Name: car car_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

-- Добавление ограничения первичного ключа таблицы “car”

ALTER TABLE ONLY public.car
    ADD CONSTRAINT car_pkey PRIMARY KEY (id_car);


--
```

```
-- TOC entry 2757 (class 2606 OID 16458)
-- Name: driver driver_passport_unique; Type: CONSTRAINT; Schema: public; Owner:
postgres
--

-- Добавление ограничения уникальности для столбца driver_passport таблицы “driver”

ALTER TABLE ONLY public.driver
    ADD CONSTRAINT driver_passport_unique UNIQUE (driver_passport);


--
-- TOC entry 2759 (class 2606 OID 16428)
-- Name: driver driver_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

-- Добавление ограничения первичного ключа таблицы “driver”

ALTER TABLE ONLY public.driver
    ADD CONSTRAINT driver_pkey PRIMARY KEY (id_driver);


--
-- TOC entry 2745 (class 2606 OID 16465)
-- Name: employee employee_passport_check; Type: CONSTRAINT; Schema: public; Owner:
postgres
--

-- Добавление ограничения уникальности для столбца employee_passport таблицы
“employee”

ALTER TABLE ONLY public.employee
    ADD CONSTRAINT employee_passport_check UNIQUE (employee_passport);


--
-- TOC entry 2747 (class 2606 OID 16408)
-- Name: employee employee_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

-- Добавление ограничения первичного ключа таблицы “employee”

ALTER TABLE ONLY public.employee
    ADD CONSTRAINT employee_pkey PRIMARY KEY (id_employee);


--
-- TOC entry 2753 (class 2606 OID 16549)
-- Name: car gos_number_unique; Type: CONSTRAINT; Schema: public; Owner: postgres
--

-- Добавление ограничения уникальности для столбца gos_number таблицы “car”

ALTER TABLE ONLY public.car
    ADD CONSTRAINT gos_number_unique UNIQUE (gos_number);


--
-- TOC entry 2749 (class 2606 OID 16413)
-- Name: model model_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--
```

```
-- Добавление ограничения первичного ключа таблицы “model”

ALTER TABLE ONLY public.model
    ADD CONSTRAINT model_pkey PRIMARY KEY (id_model);


--
-- TOC entry 2741 (class 2606 OID 16398)
-- Name: passenger passenger_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

-- Добавление ограничения первичного ключа таблицы “passenger”

ALTER TABLE ONLY public.passenger
    ADD CONSTRAINT passenger_pkey PRIMARY KEY (id_passenger);


--
-- TOC entry 2755 (class 2606 OID 16423)
-- Name: schedule schedule_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

-- Добавление ограничения первичного ключа таблицы “schedule”

ALTER TABLE ONLY public.schedule
    ADD CONSTRAINT schedule_pkey PRIMARY KEY (id_shift);


--
-- TOC entry 2743 (class 2606 OID 16403)
-- Name: tariff tariff_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

-- Добавление ограничения первичного ключа таблицы “tariff”

ALTER TABLE ONLY public.tariff
    ADD CONSTRAINT tariff_pkey PRIMARY KEY (id_tariff);


--
-- TOC entry 2761 (class 2606 OID 16433)
-- Name: taxi_call taxi_call_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

-- Добавление ограничения первичного ключа таблицы “taxi_call”

ALTER TABLE ONLY public.taxi_call
    ADD CONSTRAINT taxi_call_pkey PRIMARY KEY (id_taxi_call);


--
-- TOC entry 2763 (class 2606 OID 16518)
-- Name: schedule fk_car; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

-- Добавление ограничения внешнего ключа для столбца id_car таблицы “schedule”

ALTER TABLE ONLY public.schedule
    ADD CONSTRAINT fk_car FOREIGN KEY (id_car) REFERENCES public.car(id_car);


--
```

```
-- TOC entry 2767 (class 2606 OID 16538)
-- Name: taxi_call fk_car; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

-- Добавление ограничения внешнего ключа для столбца id_car таблицы “taxi_call”

ALTER TABLE ONLY public.taxi_call
    ADD CONSTRAINT fk_car FOREIGN KEY (id_car) REFERENCES public.car(id_car);


--
-- TOC entry 2764 (class 2606 OID 16523)
-- Name: schedule fk_driver; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

-- Добавление ограничения внешнего ключа для столбца id_driver таблицы “schedule”

ALTER TABLE ONLY public.schedule
    ADD CONSTRAINT fk_driver FOREIGN KEY (id_driver) REFERENCES
public.driver(id_driver);


--
-- TOC entry 2765 (class 2606 OID 16528)
-- Name: taxi_call fk_employee; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

-- Добавление ограничения внешнего ключа для столбца id_employee таблицы “taxi_call”

ALTER TABLE ONLY public.taxi_call
    ADD CONSTRAINT fk_employee FOREIGN KEY (id_employee) REFERENCES
public.employee(id_employee);


--
-- TOC entry 2762 (class 2606 OID 16513)
-- Name: car fk_model; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

-- Добавление ограничения внешнего ключа для столбца id_model таблицы “car”

ALTER TABLE ONLY public.car
    ADD CONSTRAINT fk_model FOREIGN KEY (id_model) REFERENCES public.model(id_model);


--
-- TOC entry 2768 (class 2606 OID 16543)
-- Name: taxi_call fk_passenger; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

-- Добавление ограничения внешнего ключа для столбца id_passenger таблицы “taxi_call”

ALTER TABLE ONLY public.taxi_call
    ADD CONSTRAINT fk_passenger FOREIGN KEY (id_passenger) REFERENCES
public.passenger(id_passenger);


--
-- TOC entry 2766 (class 2606 OID 16533)
-- Name: taxi_call fk_tariff; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--
```

```
-- Добавление ограничения внешнего ключа для столбца id_tariff таблицы “taxi_call”

ALTER TABLE ONLY public.taxi_call
    ADD CONSTRAINT fk_tariff FOREIGN KEY (id_tariff) REFERENCES
public.tariff(id_tariff);


-- Completed on 2022-03-02 04:14:57

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

Выводы:

В результате выполненной работы:

- Создана БД «Служба заказа такси» с использованием pgAdmin 4;
- Установлены ограничения на данные *Primary Key*, *Unique*, *Check*, *Foreign Key*;
- Таблицы БД заполнены рабочими данными;
- Создана резервная копия БД и успешно восстановлена.