**Министерство науки и высшего образования Российской Федерации**
федеральное государственное автономное образовательное учреждение высшего образования
**«НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ ИТМО»**

**Отчет**

по лабораторной работе №3 «СОЗДАНИЕ ТАБЛИЦ БАЗЫ ДАННЫХ POSTGRESQL. ЗАПОЛНЕНИЕ ТАБЛИЦ РАБОЧИМИ ДАННЫМИ»

по дисциплине **«Проектирование и реализация баз данных»**

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Санкт-Петербург 2023

# Оглавление

**Цель работы**

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

**Практическое задание**

Создать базу данных с использованием pgAdmin 4 (согласно индивидуальному заданию).

1. Создать схему в составе базы данных.
2. Создать таблицы базы данных.
3. Установить ограничения на данные: *Primary Key, Unique, Check, Foreign Key*.
4. Заполнить таблицы БД рабочими данными.
5. 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.

**Вариант 11. БД «Автомастерская»**

**Описание предметной области:**

Описание предметной области: Сеть автомастерских осуществляет ремонт автомобилей, используя для этих целей штат мастеров и свои мастерские. Стоимость ремонта включает цену деталей и стоимость работы.

Заработная плата мастеров составляет 50% стоимости работы.

С клиентом заключается договор на выполнение авторемонтных и профилактических работ, который сопровождается администратором. В каждом договоре может быть несколько видов услуг. Для выполнения видов работ могут требоваться детали или расходные материалы, которые предоставляет либо клиент, либо автомастерская. Если детали предоставляет автомастерская, то их стоимость включается в смету по договору.

Каждый вид работ могут выполнять разные мастера, в зависимости от их специализации. Распределение мастеров выполняет администратор.

БД должна содержать следующий минимальный набор сведений: Табельный номер сотрудника. ФИО сотрудника. Должность. Разряд мастера. Специализация. Адрес автомастерской. Дата заказа. Гос. Номер автомобиля. Марка. Мощность автомобиля. Год выпуска. Цвет автомобиля. Дата принятия в ремонт. Плановая дата окончания ремонта. Фактическая дата окончания ремонта. Вид ремонта. Стоимость вида ремонта. Название детали. Цена детали. Марка и модель автомобиля. Страна производителя. Госномер автомобиля. ФИО владельца. Номер телефона владельца. E-mail владельца.

**Выполнение**

Название создаваемой БД – «Автомастерская» («Autorepair Shop»)

Схема логической модели базы данных, которая сгенерирована в Generate ERD, находится на рисунке 1.

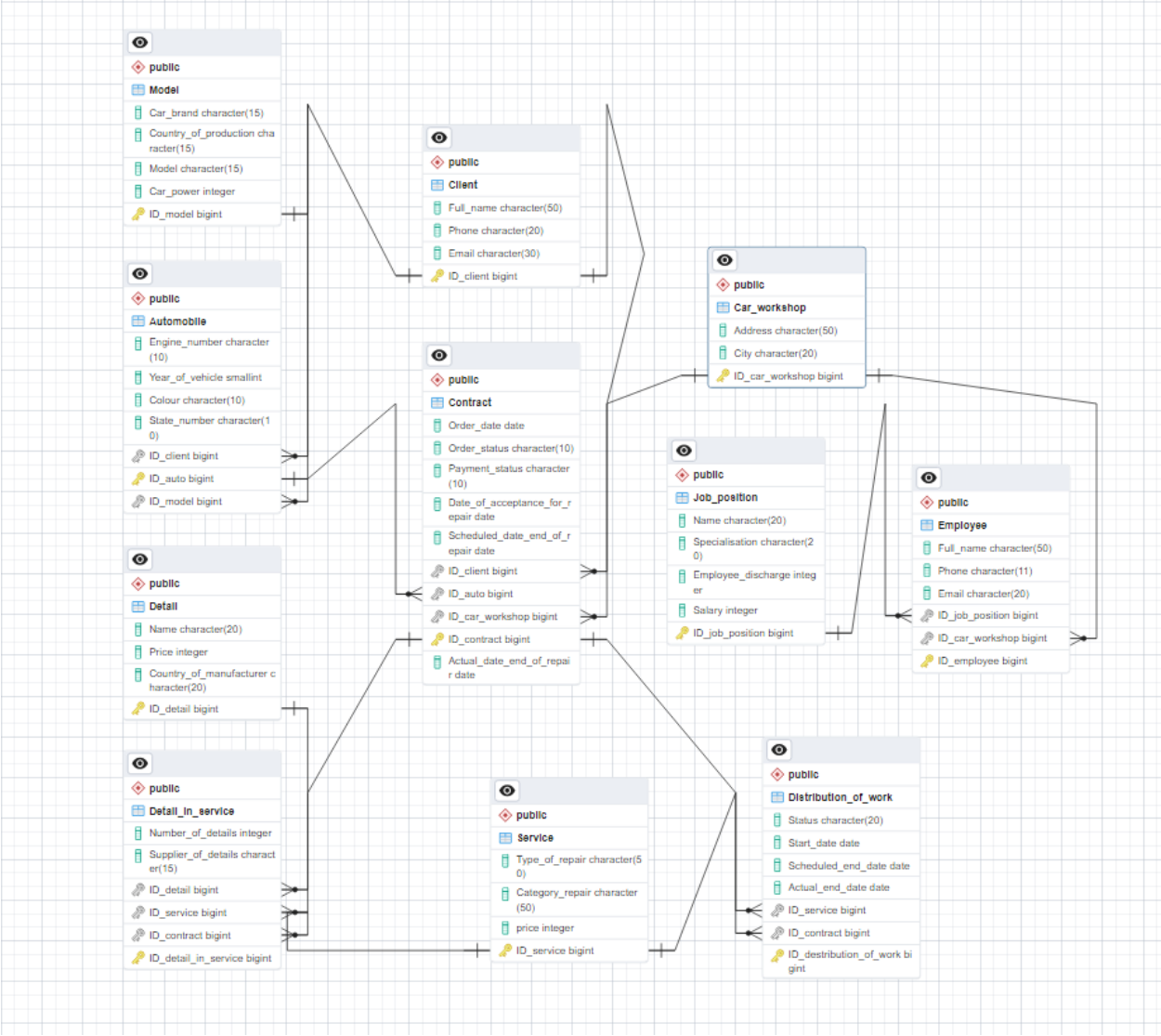


Рисунок 1 — ERD-схема базы данных

В конце выполнения лабораторной была выполнена резервная копия всей базы данных. Dump со всеми данными предоставлен ниже.

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

-- Dumped from database version 16.0
-- Dumped by pg_dump version 16.0
```

```
-- Started on 2023-10-26 17:35:11

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 216 (class 1259 OID 16404)
-- Name: Automobile; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Automobile" (
    "Engine_number" character(10) NOT NULL,
    "Year_of_vehicle" smallint NOT NULL,
    "Colour" character(10) NOT NULL,
    "State_number" character(10) NOT NULL,
    "ID_client" bigint NOT NULL,
    "ID_auto" bigint NOT NULL,
    "ID_model" bigint NOT NULL
);


ALTER TABLE public."Automobile" OWNER TO postgres;
```

```
--
-- TOC entry 227 (class 1259 OID 16532)
-- Name: Automobile_ID_auto_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--

CREATE SEQUENCE public."Automobile_ID_auto_seq"
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER SEQUENCE public."Automobile_ID_auto_seq" OWNER TO postgres;

--
-- TOC entry 4932 (class 0 OID 0)
-- Dependencies: 227
-- Name: Automobile_ID_auto_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner: postgres
--

ALTER SEQUENCE public."Automobile_ID_auto_seq" OWNED BY public."Automobile"."ID_auto";


--
-- TOC entry 218 (class 1259 OID 16424)
-- Name: Car_workshop; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Car_workshop" (
    "Address" character(50) NOT NULL,
    "City" character(20) NOT NULL,
    "ID_car_workshop" bigint NOT NULL
```

```
);


ALTER TABLE public."Car_workshop" OWNER TO postgres;


--
-- TOC entry 230 (class 1259 OID 16568)
-- Name: Car_workshop_ID_car_workshop_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--

CREATE SEQUENCE public."Car_workshop_ID_car_workshop_seq"
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER SEQUENCE public."Car_workshop_ID_car_workshop_seq" OWNER TO postgres;


--
-- TOC entry 4933 (class 0 OID 0)
-- Dependencies: 230
-- Name: Car_workshop_ID_car_workshop_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner: postgres
--

ALTER SEQUENCE public."Car_workshop_ID_car_workshop_seq" OWNED BY public."Car_workshop"."ID_car_workshop";


--
-- TOC entry 215 (class 1259 OID 16399)
-- Name: Client; Type: TABLE; Schema: public; Owner: postgres
--
```

```
CREATE TABLE public."Client" (
    "Full_name" character(50) NOT NULL,
    "Phone" character(20) NOT NULL,
    "Email" character(30),
    "ID_client" bigint NOT NULL
);


ALTER TABLE public."Client" OWNER TO postgres;

--
-- TOC entry 226 (class 1259 OID 16515)
-- Name: Client_ID_client_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--

CREATE SEQUENCE public."Client_ID_client_seq"
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER SEQUENCE public."Client_ID_client_seq" OWNER TO postgres;

--
-- TOC entry 4934 (class 0 OID 0)
-- Dependencies: 226
-- Name: Client_ID_client_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner: postgres
--

ALTER SEQUENCE public."Client_ID_client_seq" OWNED BY public."Client"."ID_client";
```

```
--
-- TOC entry 222 (class 1259 OID 16459)
-- Name: Contract; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Contract" (
    "Order_date" date NOT NULL,
    "Order_status" character(10) NOT NULL,
    "Payment_status" character(10) NOT NULL,
    "Date_of_acceptance_for_repair" date NOT NULL,
    "Scheduled_date_end_of_repair" date,
    "ID_client" bigint NOT NULL,
    "ID_auto" bigint NOT NULL,
    "ID_contract" bigint NOT NULL,
    "Actual_date_end_of_repair" date,
    "Total_payment" bigint,
    "ID_employee" bigint
);


ALTER TABLE public."Contract" OWNER TO postgres;

--
-- TOC entry 234 (class 1259 OID 16622)
-- Name: Contract_ID_contract_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--

CREATE SEQUENCE public."Contract_ID_contract_seq"
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;
```

```
ALTER SEQUENCE public."Contract_ID_contract_seq" OWNER TO postgres;

--
-- TOC entry 4935 (class 0 OID 0)
-- Dependencies: 234
-- Name: Contract_ID_contract_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner: postgres
--

ALTER SEQUENCE public."Contract_ID_contract_seq" OWNED BY public."Contract"."ID_contract";


--
-- TOC entry 225 (class 1259 OID 16505)
-- Name: Detail; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Detail" (
    "Name" character(20) NOT NULL,
    "Price" integer,
    "Country_of_manufacturer" character(20) NOT NULL,
    "ID_detail" bigint NOT NULL
);


ALTER TABLE public."Detail" OWNER TO postgres;

--
-- TOC entry 232 (class 1259 OID 16593)
-- Name: Detail_ID_detail_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--

CREATE SEQUENCE public."Detail_ID_detail_seq"
    START WITH 1
    INCREMENT BY 1
```

```
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER SEQUENCE public."Detail_ID_detail_seq" OWNER TO postgres;

--
-- TOC entry 4936 (class 0 OID 0)
-- Dependencies: 232
-- Name: Detail_ID_detail_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner: postgres
--

ALTER SEQUENCE public."Detail_ID_detail_seq" OWNED BY public."Detail"."ID_detail";


--
-- TOC entry 224 (class 1259 OID 16492)
-- Name: Detail_in_service; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Detail_in_service" (
    "Number_of_details" integer NOT NULL,
    "ID_detail" bigint NOT NULL,
    "ID_service" bigint,
    "ID_contract" bigint NOT NULL,
    "ID_detail_in_service" bigint NOT NULL
);


ALTER TABLE public."Detail_in_service" OWNER TO postgres;

--
-- TOC entry 235 (class 1259 OID 16658)
```

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

CREATE SEQUENCE public."Detail_in_service_ID_detail_in_service_seq"
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER SEQUENCE public."Detail_in_service_ID_detail_in_service_seq" OWNER TO postgres;

--
-- TOC entry 4937 (class 0 OID 0)
-- Dependencies: 235
-- Name: Detail_in_service_ID_detail_in_service_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner: postgres
--

ALTER SEQUENCE public."Detail_in_service_ID_detail_in_service_seq" OWNED BY public."Detail_in_service"."ID_detail_in_service";


--
-- TOC entry 238 (class 1259 OID 16728)
-- Name: Details_from_client; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Details_from_client" (
    "ID_detail_client" bigint NOT NULL,
    "Amount_of_detail" bigint,
    "ID_detail" bigint NOT NULL,
    "ID_distribution" bigint
```

```
);


ALTER TABLE public."Details_from_client" OWNER TO postgres;

--
-- TOC entry 237 (class 1259 OID 16727)
-- Name: Details_from_client_ID_detail_client_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--

CREATE SEQUENCE public."Details_from_client_ID_detail_client_seq"
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER SEQUENCE public."Details_from_client_ID_detail_client_seq" OWNER TO postgres;

--
-- TOC entry 4938 (class 0 OID 0)
-- Dependencies: 237
-- Name: Details_from_client_ID_detail_client_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner: postgres
--

ALTER SEQUENCE public."Details_from_client_ID_detail_client_seq" OWNED BY public."Details_from_client"."ID_detail_client";


--
-- TOC entry 223 (class 1259 OID 16479)
-- Name: Distribution_of_work; Type: TABLE; Schema: public; Owner: postgres
--
```

```
CREATE TABLE public."Distribution_of_work" (
    "Status" character(20) NOT NULL,
    "Start_date" date NOT NULL,
    "Scheduled_end_date" date,
    "Actual_end_date" date,
    "ID_service" bigint NOT NULL,
    "ID_contract" bigint NOT NULL,
    "ID_destribution_of_work" bigint NOT NULL,
    "Quantity_of_services" bigint,
    "ID_details_from_client" bigint
);


ALTER TABLE public."Distribution_of_work" OWNER TO postgres;

--
-- TOC entry 236 (class 1259 OID 16665)
-- Name: Distribution_of_work_ID_destribution_of_work_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--

CREATE SEQUENCE public."Distribution_of_work_ID_destribution_of_work_seq"
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER SEQUENCE public."Distribution_of_work_ID_destribution_of_work_seq" OWNER TO postgres;

--
-- TOC entry 4939 (class 0 OID 0)
-- Dependencies: 236
```

```
-- Name: Distribution_of_work_ID_destribution_of_work_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner: postgres
--

ALTER SEQUENCE public."Distribution_of_work_ID_destribution_of_work_seq" OWNED BY public."Distribution_of_work"."ID_destribution_of_work";



--
-- TOC entry 219 (class 1259 OID 16429)
-- Name: Employee; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Employee" (
    "Full_name" character(50) NOT NULL,
    "Phone" character(11) NOT NULL,
    "Email" character(20),
    "ID_job_position" bigint NOT NULL,
    "ID_car_workshop" bigint NOT NULL,
    "ID_employee" bigint NOT NULL
);



ALTER TABLE public."Employee" OWNER TO postgres;

--
-- TOC entry 231 (class 1259 OID 16586)
-- Name: Employee_ID_employee_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--

CREATE SEQUENCE public."Employee_ID_employee_seq"
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;
```

```
ALTER SEQUENCE public."Employee_ID_employee_seq" OWNER TO postgres;


--
-- TOC entry 4940 (class 0 OID 0)
-- Dependencies: 231
-- 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 217 (class 1259 OID 16419)
-- Name: Job_position; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Job_position" (
    "Name" character(20) NOT NULL,
    "Specialisation" character(20) NOT NULL,
    "Employee_discharge" integer NOT NULL,
    "Salary" integer,
    "ID_job_position" bigint NOT NULL
);


ALTER TABLE public."Job_position" OWNER TO postgres;


--
-- TOC entry 229 (class 1259 OID 16556)
-- Name: Job_position_ID_job_position_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--
```

```
CREATE SEQUENCE public."Job_position_ID_job_position_seq"
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER SEQUENCE public."Job_position_ID_job_position_seq" OWNER TO postgres;


--
-- TOC entry 4941 (class 0 OID 0)
-- Dependencies: 229
-- Name: Job_position_ID_job_position_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner: postgres
--

ALTER SEQUENCE public."Job_position_ID_job_position_seq" OWNED BY public."Job_position"."ID_job_position";



--
-- TOC entry 220 (class 1259 OID 16444)
-- Name: Model; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Model" (
    "Car_brand" character(15) NOT NULL,
    "Country_of_production" character(15) NOT NULL,
    "Model" character(15) NOT NULL,
    "Car_power" integer NOT NULL,
    "ID_model" bigint NOT NULL
);
```

```
ALTER TABLE public."Model" OWNER TO postgres;

--
-- TOC entry 228 (class 1259 OID 16544)
-- Name: Model_ID_model_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--

CREATE SEQUENCE public."Model_ID_model_seq"
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER SEQUENCE public."Model_ID_model_seq" OWNER TO postgres;

--
-- TOC entry 4942 (class 0 OID 0)
-- Dependencies: 228
-- Name: Model_ID_model_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner: postgres
--

ALTER SEQUENCE public."Model_ID_model_seq" OWNED BY public."Model"."ID_model";


--
-- TOC entry 221 (class 1259 OID 16454)
-- Name: Service; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Service" (
    "Type_of_repair" character(50) NOT NULL,
    "Category_repair" character(50) NOT NULL,
    price integer,
```

```
    "ID_service" bigint NOT NULL
);


ALTER TABLE public."Service" OWNER TO postgres;

--
-- TOC entry 233 (class 1259 OID 16605)
-- Name: Service_ID_service_seq; Type: SEQUENCE; Schema: public; Owner: postgres
--

CREATE SEQUENCE public."Service_ID_service_seq"
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER SEQUENCE public."Service_ID_service_seq" OWNER TO postgres;

--
-- TOC entry 4943 (class 0 OID 0)
-- Dependencies: 233
-- Name: Service_ID_service_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner:
postgres
--

ALTER SEQUENCE public."Service_ID_service_seq" OWNED BY
public."Service"."ID_service";


--
-- TOC entry 4690 (class 2604 OID 16533)
-- Name: Automobile ID_auto; Type: DEFAULT; Schema: public; Owner: postgres
--
```

```
ALTER TABLE ONLY public."Automobile" ALTER COLUMN "ID_auto" SET DEFAULT
nextval('public."Automobile_ID_auto_seq"'::regclass);


--
-- TOC entry 4692 (class 2604 OID 16569)
-- Name: Car_workshop ID_car_workshop; Type: DEFAULT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Car_workshop" ALTER COLUMN "ID_car_workshop" SET
DEFAULT nextval('public."Car_workshop_ID_car_workshop_seq"'::regclass);


--
-- TOC entry 4689 (class 2604 OID 16516)
-- Name: Client ID_client; Type: DEFAULT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Client" ALTER COLUMN "ID_client" SET DEFAULT
nextval('public."Client_ID_client_seq"'::regclass);


--
-- TOC entry 4696 (class 2604 OID 16623)
-- Name: Contract ID_contract; Type: DEFAULT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Contract" ALTER COLUMN "ID_contract" SET DEFAULT
nextval('public."Contract_ID_contract_seq"'::regclass);


--
-- TOC entry 4699 (class 2604 OID 16594)
-- Name: Detail ID_detail; Type: DEFAULT; Schema: public; Owner: postgres
--
```

```
ALTER TABLE ONLY public."Detail" ALTER COLUMN "ID_detail" SET DEFAULT
nextval('public."Detail_ID_detail_seq"'::regclass);


--
-- TOC entry 4698 (class 2604 OID 16659)
-- Name: Detail_in_service ID_detail_in_service; Type: DEFAULT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Detail_in_service" ALTER COLUMN "ID_detail_in_service"
SET DEFAULT nextval('public."Detail_in_service_ID_detail_in_service_seq"'::regclass);


--
-- TOC entry 4700 (class 2604 OID 16731)
-- Name: Details_from_client ID_detail_client; Type: DEFAULT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Details_from_client" ALTER COLUMN "ID_detail_client" SET
DEFAULT nextval('public."Details_from_client_ID_detail_client_seq"'::regclass);


--
-- TOC entry 4697 (class 2604 OID 16666)
-- Name: Distribution_of_work ID_destribution_of_work; Type: DEFAULT; Schema: public;
Owner: postgres
--

ALTER TABLE ONLY public."Distribution_of_work" ALTER COLUMN
"ID_destribution_of_work" SET DEFAULT
nextval('public."Distribution_of_work_ID_destribution_of_work_seq"'::regclass);


--
```

```
-- TOC entry 4693 (class 2604 OID 16587)
-- 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 4691 (class 2604 OID 16557)
-- Name: Job_position ID_job_position; Type: DEFAULT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Job_position" ALTER COLUMN "ID_job_position" SET
DEFAULT nextval('public."Job_position_ID_job_position_seq"'::regclass);


--
-- TOC entry 4694 (class 2604 OID 16545)
-- Name: Model ID_model; Type: DEFAULT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Model" ALTER COLUMN "ID_model" SET DEFAULT
nextval('public."Model_ID_model_seq"'::regclass);


--
-- TOC entry 4695 (class 2604 OID 16606)
-- Name: Service ID_service; Type: DEFAULT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Service" ALTER COLUMN "ID_service" SET DEFAULT
nextval('public."Service_ID_service_seq"'::regclass);


--
```

-- TOC entry 4904 (class 0 OID 16404)

-- Dependencies: 216

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

--

COPY public."Automobile" ("Engine_number", "Year_of_vehicle", "Colour", "State_number", "ID_client", "ID_auto", "ID_model") FROM stdin;

| | | | | | | |
|---|---|---|---|---|---|---|
| 12345 | 2022 | Red | ABC123 | 2 | 2 | 2 |
| 67890 | 2021 | Blue | XYZ789 | 3 | 3 | 3 |
| 54321 | 2023 | Black | DEF456 | 4 | 4 | 4 |
| 98765 | 2020 | White | LMN789 | 5 | 5 | 5 |
| 11111 | 2022 | Silver | OPQ123 | 6 | 6 | 6 |
| 22222 | 2020 | Green | RST456 | 7 | 7 | 7 |
| 33333 | 2023 | Yellow | UVW789 | 8 | 8 | 8 |
| 44444 | 2021 | Gray | XYZ123 | 9 | 9 | 9 |
| 55555 | 2022 | Orange | ABC789 | 10 | 10 | 10 |
| 66666 | 2020 | Purple | DEF123 | 11 | 11 | 11 |
| 1234 | 2022 | Blue\n | МЩ999Н | 1 | 1 | 1 |

\.

--

-- TOC entry 4906 (class 0 OID 16424)

-- Dependencies: 218

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

--

COPY public."Car_workshop" ("Address", "City", "ID_car_workshop") FROM stdin;

| | | |
|---|---|---|
| Lomonosova, 9 | Saint-Petersburg\n | 1 |
| 123 Главная улица | Москва | 2 |
| 456 Пушкина улица | Санкт-Петербург | 3 |
| 789 Ленина улица | Екатеринбург | 4 |
| 101 Гагарина улица | Новосибирск | 5 |
| 222 Волгоградская улица | Волгоград | 6 |
| 333 Кирова улица | Казань | 7 |
| 444 Ленинградская улица | Самара | 8 |

555 Пролетарская улица Ростов-на-Дону 9

666 Труда улица Пермь 10

777 Комсомольская улица Омск 11

\.

--

-- TOC entry 4903 (class 0 OID 16399)

-- Dependencies: 215

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

--

COPY public."Client" ("Full_name", "Phone", "Email", "ID_client") FROM stdin;

Ananiev Nikita 89218975555 nikita@gmail.com\n 1

Ospelnikov Alexey 89215674444 alexey@gmail.com 2

Иван Петров 12345678901 ivan@email.com 3

Мария Сидорова 55555555555 maria@email.com 4

Андрей Иванов 99999999999 andrey@email.com 5

Наталья Козлова 77777777777 \N 6

Анна Краснова 88888888888 anna@email.com 8

Павел Морозов 77788899900 pavel@email.com 9

Елена Попова 44455566677 elena@email.com
10

Ольга Григорьева 11122233344 olga@email.com
12

Нина Игнатьева 33366699911 nina@email.com
13

Katherine Jenkins +1-799-216-3601x0789
charles80@example.org 14

Martin Robinson 928-263-4386 apoole@example.net
15

Jenna Allen +1-711-814-9816 grahamhayden@example.org
16

Tammy Cook (517)692-5346x19846
jonathan21@example.com 17

Antonio May 2572421579 sara19@example.net
18

Ryan Weaver 298.341.5725x0714 zharmon@example.com
19

Renee Woods +1-208-845-0991x429
michael06@example.org 20

Денис Смирнов 89218975555 denis@email.com 7

Сергей Васильев 89218975555 sergey@email.com
11

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--

-- TOC entry 4910 (class 0 OID 16459)

-- Dependencies: 222

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

--

COPY public."Contract" ("Order_date", "Order_status", "Payment_status", "Date_of_acceptance_for_repair", "Scheduled_date_end_of_repair", "ID_client", "ID_auto", "ID_contract", "Actual_date_end_of_repair", "Total_payment", "ID_employee") FROM stdin;

2023-10-10 Заказан Оплачен 2023-10-12 2023-10-15 2 2 2
2023-10-16 \N \N

2023-10-11 Заказан Не оплачен 2023-10-13 2023-10-16 3 3 3
\N \N \N

2023-10-12 В процессе Оплачен 2023-10-14 2023-10-17 4 4 4
\N \N \N

2023-10-13 Заказан Оплачен 2023-10-15 2023-10-18 5 5 5
\N \N \N

2023-10-14 В процессе Оплачен 2023-10-16 2023-10-19 6 6 6
\N \N \N

2023-10-15 Заказан Не оплачен 2023-10-17 2023-10-20 7 7 7
\N \N \N

2023-10-16 В процессе Оплачен 2023-10-18 2023-10-21 8 8 8
\N \N \N

2023-10-17 Завершен Оплачен 2023-10-19 2023-10-22 9 9 9
2023-10-23 \N \N

2023-10-18 В процессе Не оплачен 2023-10-20 2023-10-23 10 10 10
\N \N \N

2023-10-19 Заказан Оплачен 2023-10-21 2023-10-24 11 11 11
\N \N \N

2023-10-24 Заказан Не оплачен 2023-10-24 2023-11-24 1 1 1
\N \N \N
\.

--
-- TOC entry 4913 (class 0 OID 16505)
-- Dependencies: 225
-- Data for Name: Detail; Type: TABLE DATA; Schema: public; Owner: postgres
--

COPY public."Detail" ("Name", "Price", "Country_of_manufacturer", "ID_detail") FROM stdin;
Wheel Mercedes 25000 Germany 1
Запасное колесо 45613 Россия 2
Тормозные колодки 17289 Германия 3
Масляный фильтр 13993 Китай 4
Свеча зажигания 40027 США 5
Воздушный фильтр 12493 Германия 6
Моторное масло 46395 Россия 7
Антифриз 17957 Китай 8
Топливный фильтр 20618 Германия 9
Ремень ГРМ 28848 Россия 10
Передний фонарь 19397 Германия 11
\.

--
-- TOC entry 4912 (class 0 OID 16492)
-- Dependencies: 224
-- Data for Name: Detail_in_service; Type: TABLE DATA; Schema: public; Owner: postgres
--

COPY public."Detail_in_service" ("Number_of_details", "ID_detail", "ID_service", "ID_contract", "ID_detail_in_service") FROM stdin;
2 1 1 1 1
2 3 3 2 2

1 4 5 3 3

1 5 5 3 4

1 6 5 3 5

5 7 5 3 6

1 8 8 4 7

1 9 9 5 8

1 10 7 6 9

1 11 6 7 10

1 5 5 8 11

\.

--

-- TOC entry 4926 (class 0 OID 16728)

-- Dependencies: 238

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

--

COPY public."Details_from_client" ("ID_detail_client", "Amount_of_detail", "ID_detail", "ID_distribution") FROM stdin;

\.

--

-- TOC entry 4911 (class 0 OID 16479)

-- Dependencies: 223

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

--

COPY public."Distribution_of_work" ("Status", "Start_date", "Scheduled_end_date", "Actual_end_date", "ID_service", "ID_contract", "ID_destribution_of_work", "Quantity_of_services", "ID_details_from_client") FROM stdin;

Pending 2023-10-24 2023-11-24 \N 1 1 1 \N \N

Scheduled 2023-10-25 2023-10-26 \N 5 5 2 \N \N

Scheduled 2023-10-27 2023-10-28 \N 6 6 3 \N \N

In Progress 2023-10-29 2023-10-30 \N 5 7 4 \N \N

```
Scheduled	2023-10-30	2023-10-31	\N	6	8	5	\N	\N
In Progress	2023-11-01	2023-11-02	\N	7	9	6	\N	\N
In Progress	2023-11-03	2023-11-04	\N	8	10	7	\N	\N
Scheduled	2023-11-05	2023-11-06	\N	9	11	8	\N	\N
In Progress	2023-11-06	2023-11-07	\N	10	4	9	\N	\N
In Progress	2023-11-08	2023-11-09	\N	11	3	10	\N	\N
In Progress	2023-11-10	2023-11-11	\N	5	2	11	\N	\N
\.


--
-- TOC entry 4907 (class 0 OID 16429)
-- Dependencies: 219
-- Data for Name: Employee; Type: TABLE DATA; Schema: public; Owner: postgres
--

COPY public."Employee" ("Full_name", "Phone", "Email", "ID_job_position",
"ID_car_workshop", "ID_employee") FROM stdin;
Yaroslav Sahno	89991238866	sahno@gmail.com	1	1	1
Иван Петров	12345678901	ivan@example.com	2	2
2
Елена Смирнова	98765432101	elena@example.com	3	3
3
Алексей Иванов	11122233344	alex@example.com	4	2
4
Ольга Козлова	55566677788	olga@example.com	5	3
5
Максим Соколов	99900011122	max@example.com	6	2
6
Анна Павлова	33344455566	anna@example.com	7	3
7
Петр Михайлов	77788899911	peter@example.com	8	2
8
Евгения Никитина	12312312312	evgenia@example.com	9	3
9
Дмитрий Андреев	45645645678	dmitry@example.com	10	2
10
```

Наталья Кузнецова 78978978900 natalia@example.com 11 3
11

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--

-- TOC entry 4905 (class 0 OID 16419)

-- Dependencies: 217

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

--

COPY public."Job_position" ("Name", "Specialisation", "Employee_discharge", "Salary", "ID_job_position") FROM stdin;

Manager Communication 2 33000 1

Мастер-механик Автомеханика 10 60000 2

Слесарь-сантехник Автоэлектрика 5 55000 3

Мастер-краскопульт Кузовной ремонт 7 62000 4

Автоинспектор Диагностика 8 58000 5

Мастер-шиномонтажник Шиномонтаж 3 54000 6

Автослесарь Общий ремонт 6 58000 7

Диагност-техник Диагностика 5 62000 8

Кузовщик Кузовной ремонт 7 60000 9

Шиномонтажник Шиномонтаж 6 54000 10

Автомаляр Кузовной ремонт 4 62000 11

\.

--

-- TOC entry 4908 (class 0 OID 16444)

-- Dependencies: 220

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

--

COPY public."Model" ("Car_brand", "Country_of_production", "Model", "Car_power", "ID_model") FROM stdin;

Mercedes Germany S-class 500 1

Toyota Japan Camry 200 2
Honda Japan Civic 150 3
Ford USA Mustang 350 4
Volkswagen Germany Golf 120 5
Hyundai South Korea Elantra 140 6
Chevrolet USA Cruze 130 7
Nissan Japan Altima 180 8
Mercedes-Benz Germany E-Class 250 9
BMW Germany 3 Series 220 10
Lexus Japan RX 260 11
Audi Germany A4 200 12
\.

--
-- TOC entry 4909 (class 0 OID 16454)
-- Dependencies: 221
-- Data for Name: Service; Type: TABLE DATA; Schema: public; Owner: postgres
--

COPY public."Service" ("Type_of_repair", "Category_repair", price, "ID_service") FROM stdin;
Wheel reapir Замена суппортов 8000 1
Замена масла Техническое обслуживание 50 2
Ремонт тормозной системы Ремонт 150 3
Замена сцепления Ремонт 200 4
Диагностика двигателя Техническое обслуживание 80 5
Замена глушителя Ремонт 120 6
Замена ремня ГРМ Техническое обслуживание 100 7
Ремонт электрики Ремонт 90 8
Замена аккумулятора Техническое обслуживание 60 9
Ремонт подвески Ремонт 180 10
Замена фильтра воздушного очистителя Техническое обслуживание 40 11

\.

--
-- TOC entry 4944 (class 0 OID 0)
-- Dependencies: 227
-- Name: Automobile_ID_auto_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres
--

SELECT pg_catalog.setval('public."Automobile_ID_auto_seq"', 1, false);

--
-- TOC entry 4945 (class 0 OID 0)
-- Dependencies: 230
-- Name: Car_workshop_ID_car_workshop_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres
--

SELECT pg_catalog.setval('public."Car_workshop_ID_car_workshop_seq"', 1, true);

--
-- TOC entry 4946 (class 0 OID 0)
-- Dependencies: 226
-- Name: Client_ID_client_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres
--

SELECT pg_catalog.setval('public."Client_ID_client_seq"', 2, true);

--
-- TOC entry 4947 (class 0 OID 0)
-- Dependencies: 234
-- Name: Contract_ID_contract_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres
--

```
SELECT pg_catalog.setval('public."Contract_ID_contract_seq"', 1, true);


--
-- TOC entry 4948 (class 0 OID 0)
-- Dependencies: 232
-- Name: Detail_ID_detail_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres
--

SELECT pg_catalog.setval('public."Detail_ID_detail_seq"', 1, true);


--
-- TOC entry 4949 (class 0 OID 0)
-- Dependencies: 235
-- Name: Detail_in_service_ID_detail_in_service_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres
--

SELECT pg_catalog.setval('public."Detail_in_service_ID_detail_in_service_seq"', 1, true);


--
-- TOC entry 4950 (class 0 OID 0)
-- Dependencies: 237
-- Name: Details_from_client_ID_detail_client_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres
--

SELECT pg_catalog.setval('public."Details_from_client_ID_detail_client_seq"', 1, false);


--
-- TOC entry 4951 (class 0 OID 0)
-- Dependencies: 236
```

-- Name: Distribution_of_work_ID_destribution_of_work_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres

--

SELECT pg_catalog.setval('public."Distribution_of_work_ID_destribution_of_work_seq"', 1, true);

--

-- TOC entry 4952 (class 0 OID 0)

-- Dependencies: 231

-- 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 4953 (class 0 OID 0)

-- Dependencies: 229

-- Name: Job_position_ID_job_position_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres

--

SELECT pg_catalog.setval('public."Job_position_ID_job_position_seq"', 1, true);

--

-- TOC entry 4954 (class 0 OID 0)

-- Dependencies: 228

-- Name: Model_ID_model_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres

--

SELECT pg_catalog.setval('public."Model_ID_model_seq"', 1, false);

```
--
-- TOC entry 4955 (class 0 OID 0)
-- Dependencies: 233
-- Name: Service_ID_service_seq; Type: SEQUENCE SET; Schema: public; Owner: postgres
--

SELECT pg_catalog.setval('public."Service_ID_service_seq"', 1, true);



--
-- TOC entry 4704 (class 2606 OID 16710)
-- Name: Automobile Automobile_Colour_check; Type: CHECK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE public."Automobile"
    ADD CONSTRAINT "Automobile_Colour_check" CHECK (("Colour" = ANY (ARRAY['Red'::bpchar, 'Blue'::bpchar, 'Green'::bpchar, 'Silver'::bpchar, 'Black'::bpchar, 'White'::bpchar]))) NOT VALID;



--
-- TOC entry 4720 (class 2606 OID 16706)
-- Name: Automobile Automobile_Engine_number_key; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Automobile"
    ADD CONSTRAINT "Automobile_Engine_number_key" UNIQUE ("Engine_number");



--
-- TOC entry 4722 (class 2606 OID 16708)
-- Name: Automobile Automobile_State_number_key; Type: CONSTRAINT; Schema: public; Owner: postgres
--
```

```
ALTER TABLE ONLY public."Automobile"
    ADD CONSTRAINT "Automobile_State_number_key" UNIQUE ("State_number");


--
-- TOC entry 4705 (class 2606 OID 16709)
-- Name: Automobile Automobile_Year_of_vehicle_check; Type: CHECK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE public."Automobile"
    ADD CONSTRAINT "Automobile_Year_of_vehicle_check" CHECK ((("Year_of_vehicle" >= 1886) AND (("Year_of_vehicle")::numeric <= EXTRACT(year FROM now())))) NOT VALID;


--
-- TOC entry 4724 (class 2606 OID 16538)
-- Name: Automobile Automobile_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Automobile"
    ADD CONSTRAINT "Automobile_pkey" PRIMARY KEY ("ID_auto");


--
-- TOC entry 4728 (class 2606 OID 16574)
-- Name: Car_workshop Car_workshop_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Car_workshop"
    ADD CONSTRAINT "Car_workshop_pkey" PRIMARY KEY ("ID_car_workshop");
```

```
--
-- TOC entry 4718 (class 2606 OID 16521)
-- Name: Client Client_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Client"
    ADD CONSTRAINT "Client_pkey" PRIMARY KEY ("ID_client");


--
-- TOC entry 4711 (class 2606 OID 16749)
-- Name: Contract Contract_Total_payment_check; Type: CHECK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE public."Contract"
    ADD CONSTRAINT "Contract_Total_payment_check" CHECK (("Total_payment" > 0)) NOT VALID;


--
-- TOC entry 4712 (class 2606 OID 16720)
-- Name: Contract Contract_check; Type: CHECK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE public."Contract"
    ADD CONSTRAINT "Contract_check" CHECK ((("Scheduled_date_end_of_repair" IS NULL) OR ("Scheduled_date_end_of_repair" >= "Date_of_acceptance_for_repair"))) NOT VALID;


--
-- TOC entry 4713 (class 2606 OID 16721)
-- Name: Contract Contract_check1; Type: CHECK CONSTRAINT; Schema: public; Owner: postgres
--
```

```
ALTER TABLE public."Contract"
    ADD CONSTRAINT "Contract_check1" CHECK ((("Actual_date_end_of_repair" IS NULL)
OR ("Actual_date_end_of_repair" >= "Date_of_acceptance_for_repair"))) NOT VALID;



--
-- TOC entry 4736 (class 2606 OID 16628)
-- Name: Contract Contract_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Contract"
    ADD CONSTRAINT "Contract_pkey" PRIMARY KEY ("ID_contract");



--
-- TOC entry 4716 (class 2606 OID 16719)
-- Name: Detail Detail_Price_check; Type: CHECK CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE public."Detail"
    ADD CONSTRAINT "Detail_Price_check" CHECK (("Price" >= 0)) NOT VALID;



--
-- TOC entry 4740 (class 2606 OID 16664)
-- Name: Detail_in_service Detail_in_service_pkey; Type: CONSTRAINT; Schema: public;
Owner: postgres
--

ALTER TABLE ONLY public."Detail_in_service"
    ADD CONSTRAINT "Detail_in_service_pkey" PRIMARY KEY ("ID_detail_in_service");



--
```

```
-- TOC entry 4742 (class 2606 OID 16599)
-- Name: Detail Detail_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Detail"
    ADD CONSTRAINT "Detail_pkey" PRIMARY KEY ("ID_detail");


--
-- TOC entry 4744 (class 2606 OID 16733)
-- Name: Details_from_client Details_from_client_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Details_from_client"
    ADD CONSTRAINT "Details_from_client_pkey" PRIMARY KEY ("ID_detail_client");


--
-- TOC entry 4714 (class 2606 OID 16751)
-- Name: Distribution_of_work Distribution_of_work_check; Type: CHECK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE public."Distribution_of_work"
    ADD CONSTRAINT "Distribution_of_work_check" CHECK ((("Scheduled_end_date" IS NULL) OR ("Scheduled_end_date" >= "Start_date"))) NOT VALID;


--
-- TOC entry 4715 (class 2606 OID 16753)
-- Name: Distribution_of_work Distribution_of_work_check1; Type: CHECK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE public."Distribution_of_work"
```

```
    ADD CONSTRAINT "Distribution_of_work_check1" CHECK ((("Actual_end_date" IS
NULL) OR ("Actual_end_date" >= "Start_date"))) NOT VALID;


--
-- TOC entry 4738 (class 2606 OID 16672)
-- Name: Distribution_of_work Distribution_of_work_pkey; Type: CONSTRAINT; Schema:
public; Owner: postgres
--

ALTER TABLE ONLY public."Distribution_of_work"
    ADD CONSTRAINT "Distribution_of_work_pkey" PRIMARY KEY
("ID_destribution_of_work");


--
-- TOC entry 4708 (class 2606 OID 16716)
-- Name: Employee Employee_Email_check; Type: CHECK CONSTRAINT; Schema: public;
Owner: postgres
--

ALTER TABLE public."Employee"
    ADD CONSTRAINT "Employee_Email_check" CHECK ((("Email" IS NULL) OR ("Email"
~* '^[A-Za-z0-9._%+-]+@[A-Za-z0-9.-]+\.[A-Za-z]{2,4}$'::text))) NOT VALID;


--
-- TOC entry 4709 (class 2606 OID 16717)
-- Name: Employee Employee_Phone_check; Type: CHECK CONSTRAINT; Schema: public;
Owner: postgres
--

ALTER TABLE public."Employee"
    ADD CONSTRAINT "Employee_Phone_check" CHECK (("Phone" ~ '^[0-9]+$'::text)) NOT
VALID;
```

```
--
-- TOC entry 4730 (class 2606 OID 16592)
-- 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 4706 (class 2606 OID 16715)
-- Name: Job_position Job_position_Employee_discharge_check; Type: CHECK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE public."Job_position"
    ADD CONSTRAINT "Job_position_Employee_discharge_check" CHECK (("Employee_discharge" > 0)) NOT VALID;


--
-- TOC entry 4707 (class 2606 OID 16714)
-- Name: Job_position Job_position_Salary_check; Type: CHECK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE public."Job_position"
    ADD CONSTRAINT "Job_position_Salary_check" CHECK (("Salary" >= 0)) NOT VALID;


--
-- TOC entry 4726 (class 2606 OID 16562)
-- Name: Job_position Job_position_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--
```

```
ALTER TABLE ONLY public."Job_position"
    ADD CONSTRAINT "Job_position_pkey" PRIMARY KEY ("ID_job_position");


--
-- TOC entry 4710 (class 2606 OID 16750)
-- Name: Model Model_Car_power_check; Type: CHECK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE public."Model"
    ADD CONSTRAINT "Model_Car_power_check" CHECK ((("Car_power" > 20) AND ("Car_power" < 1000))) NOT VALID;


--
-- TOC entry 4732 (class 2606 OID 16550)
-- Name: Model Model_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Model"
    ADD CONSTRAINT "Model_pkey" PRIMARY KEY ("ID_model");


--
-- TOC entry 4734 (class 2606 OID 16611)
-- Name: Service Service_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Service"
    ADD CONSTRAINT "Service_pkey" PRIMARY KEY ("ID_service");


--
-- TOC entry 4701 (class 2606 OID 16712)
```

-- Name: Client Проверка уникальности телефонног; Type: CHECK CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE public."Client"

ADD CONSTRAINT "Проверка уникальности телефонног" CHECK (("Email" ~* '^[A-Za-z0-9._%+-]+@[A-Za-z0-9.-]+\.[A-Za-z]{2,4}$'::text)) NOT VALID;

--

-- TOC entry 4702 (class 2606 OID 16718)

-- Name: Client Проверка, что "Phone" содержит только ; Type: CHECK CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE public."Client"

ADD CONSTRAINT "Проверка, что ""Phone"" содержит только " CHECK (("Phone" ~ '^[0-9]+$'::text)) NOT VALID;

--

-- TOC entry 4703 (class 2606 OID 16711)

-- Name: Client Проверяет, что "Email" имеет допустим; Type: CHECK CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE public."Client"

ADD CONSTRAINT "Проверяет, что ""Email"" имеет допустим" CHECK (("Email" ~* '^[A-Za-z0-9._%+-]+@[A-Za-z0-9.-]+\.[A-Za-z]{2,4}$'::text)) NOT VALID;

--

-- TOC entry 4749 (class 2606 OID 16539)

-- Name: Contract ID_auto; Type: FK CONSTRAINT; Schema: public; Owner: postgres

--

ALTER TABLE ONLY public."Contract"

```
    ADD CONSTRAINT "ID_auto" FOREIGN KEY ("ID_auto") REFERENCES
public."Automobile"("ID_auto") NOT VALID;


--
-- TOC entry 4747 (class 2606 OID 16581)
-- Name: Employee ID_car_workshop; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Employee"
    ADD CONSTRAINT "ID_car_workshop" FOREIGN KEY ("ID_car_workshop")
REFERENCES public."Car_workshop"("ID_car_workshop") NOT VALID;


--
-- TOC entry 4745 (class 2606 OID 16522)
-- Name: Automobile ID_client; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Automobile"
    ADD CONSTRAINT "ID_client" FOREIGN KEY ("ID_client") REFERENCES
public."Client"("ID_client") NOT VALID;


--
-- TOC entry 4750 (class 2606 OID 16527)
-- Name: Contract ID_client; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Contract"
    ADD CONSTRAINT "ID_client" FOREIGN KEY ("ID_client") REFERENCES
public."Client"("ID_client") NOT VALID;


--
-- TOC entry 4755 (class 2606 OID 16629)
```

```
-- Name: Detail_in_service ID_contract; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Detail_in_service"
    ADD CONSTRAINT "ID_contract" FOREIGN KEY ("ID_contract") REFERENCES
public."Contract"("ID_contract") NOT VALID;


--
-- TOC entry 4752 (class 2606 OID 16634)
-- Name: Distribution_of_work ID_contract; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Distribution_of_work"
    ADD CONSTRAINT "ID_contract" FOREIGN KEY ("ID_contract") REFERENCES
public."Contract"("ID_contract") NOT VALID;


--
-- TOC entry 4756 (class 2606 OID 16600)
-- Name: Detail_in_service ID_detail; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Detail_in_service"
    ADD CONSTRAINT "ID_detail" FOREIGN KEY ("ID_detail") REFERENCES
public."Detail"("ID_detail") NOT VALID;


--
-- TOC entry 4758 (class 2606 OID 16734)
-- Name: Details_from_client ID_detail; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--
```

```
ALTER TABLE ONLY public."Details_from_client"
    ADD CONSTRAINT "ID_detail" FOREIGN KEY ("ID_detail") REFERENCES public."Detail"("ID_detail") NOT VALID;


--
-- TOC entry 4753 (class 2606 OID 16739)
-- Name: Distribution_of_work ID_details_from_client; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Distribution_of_work"
    ADD CONSTRAINT "ID_details_from_client" FOREIGN KEY ("ID_details_from_client") REFERENCES public."Details_from_client"("ID_detail_client") NOT VALID;


--
-- TOC entry 4759 (class 2606 OID 16744)
-- Name: Details_from_client ID_distribution; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Details_from_client"
    ADD CONSTRAINT "ID_distribution" FOREIGN KEY ("ID_distribution") REFERENCES public."Distribution_of_work"("ID_destribution_of_work") NOT VALID;


--
-- TOC entry 4751 (class 2606 OID 16722)
-- Name: Contract ID_employee; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Contract"
    ADD CONSTRAINT "ID_employee" FOREIGN KEY ("ID_employee") REFERENCES public."Employee"("ID_employee") NOT VALID;
```

```
--
-- TOC entry 4748 (class 2606 OID 16563)
-- Name: Employee ID_job_position; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Employee"
    ADD CONSTRAINT "ID_job_position" FOREIGN KEY ("ID_job_position") REFERENCES public."Job_position"("ID_job_position") NOT VALID;


--
-- TOC entry 4746 (class 2606 OID 16551)
-- Name: Automobile ID_model; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Automobile"
    ADD CONSTRAINT "ID_model" FOREIGN KEY ("ID_model") REFERENCES public."Model"("ID_model") NOT VALID;


--
-- TOC entry 4757 (class 2606 OID 16612)
-- Name: Detail_in_service ID_service; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Detail_in_service"
    ADD CONSTRAINT "ID_service" FOREIGN KEY ("ID_service") REFERENCES public."Service"("ID_service") NOT VALID;


--
-- TOC entry 4754 (class 2606 OID 16617)
-- Name: Distribution_of_work ID_service; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--
```

```
ALTER TABLE ONLY public."Distribution_of_work"
    ADD CONSTRAINT "ID_service" FOREIGN KEY ("ID_service") REFERENCES public."Service"("ID_service") NOT VALID;


-- Completed on 2023-10-26 17:35:11

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

**Вывод**

В рамках данной лабораторной работы произведен перенос базы данных из нотации IDEF1X в среду управления базами данных PGAdmin 4. В процессе выполнения работы я ознакомился с основами языка SQL, осуществил заполнение таблиц строками данных и создал резервную копию своей базы данных. После этого была проведена успешная проверка работоспособности этой резервной копии, что подтвердило ее целостность и готовность к восстановлению. Этот опыт позволяет обеспечить сохранность данных и удобное управление базой данных в будущем.