

**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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## 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 находится на рисунке 1.

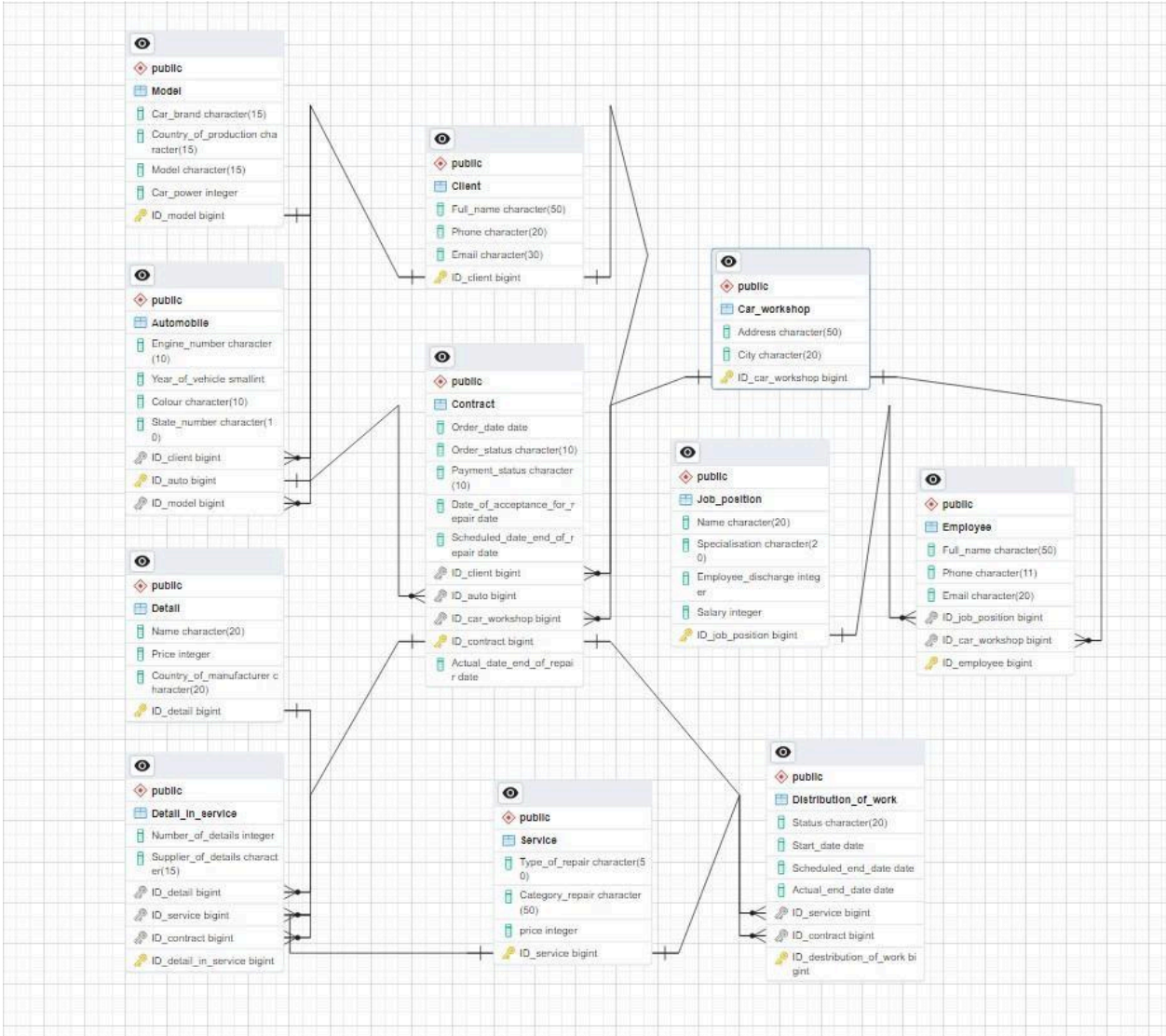


Рисунок 1 — ERD-схема базы данных

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

--
-- Dumped from database version 16.2
-- Dumped by pg_dump version 16.0
--
-- Started on 2024-03-04 15:40:08 MSK

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 215 (class 1259 OID 16421)
-- 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 216 (class 1259 OID 16424)
-- 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 3740 (class 0 OID 0)
-- Dependencies: 216
-- 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 217 (class 1259 OID 16425)
-- 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 218 (class 1259 OID 16428)
-- 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 3741 (class 0 OID 0)
-- Dependencies: 218
-- 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 219 (class 1259 OID 16429)  
-- 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 220 (class 1259 OID 16432)  
-- 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 3742 (class 0 OID 0)
-- Dependencies: 220
-- 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 221 (class 1259 OID 16433)
-- 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 222 (class 1259 OID 16436)

-- 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 3743 (class 0 OID 0)
-- Dependencies: 222
-- 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 223 (class 1259 OID 16437)
-- 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 224 (class 1259 OID 16440)
-- 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 3744 (class 0 OID 0)
-- Dependencies: 224
-- 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 225 (class 1259 OID 16441)
-- 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 226 (class 1259 OID 16444)  
-- 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 3745 (class 0 OID 0)  
-- Dependencies: 226  
-- 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 227 (class 1259 OID 16445)
```

```
-- 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 228 (class 1259 OID 16448)
```

```
-- 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 3746 (class 0 OID 0)
```

```
-- Dependencies: 228
```

```
-- 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 229 (class 1259 OID 16449)
```

```
-- 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_distribution_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 230 (class 1259 OID 16452)

-- Name: Distribution_of_work_ID_distribution_of_work_seq; Type: SEQUENCE; Schema:
public; Owner: postgres
--

CREATE SEQUENCE public."Distribution_of_work_ID_distribution_of_work_seq"

    START WITH 1

    INCREMENT BY 1

    NO MINVALUE

    NO MAXVALUE

    CACHE 1;

ALTER SEQUENCE public."Distribution_of_work_ID_distribution_of_work_seq" OWNER TO
postgres;

--

-- TOC entry 3747 (class 0 OID 0)

-- Dependencies: 230

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

ALTER SEQUENCE public."Distribution_of_work_ID_distribution_of_work_seq" OWNED BY
public."Distribution_of_work"."ID_distribution_of_work";

--

-- TOC entry 231 (class 1259 OID 16453)

-- 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 232 (class 1259 OID 16456)
-- 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 3748 (class 0 OID 0)
-- Dependencies: 232
-- 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 233 (class 1259 OID 16457)
-- 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 234 (class 1259 OID 16460)
-- 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 3749 (class 0 OID 0)

-- Dependencies: 234

-- 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 235 (class 1259 OID 16461)

-- 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 236 (class 1259 OID 16464)

-- 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 3750 (class 0 OID 0)
-- Dependencies: 236
-- 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 237 (class 1259 OID 16465)
-- 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 238 (class 1259 OID 16468)
-- 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 3751 (class 0 OID 0)
```

```
-- Dependencies: 238
```

```
-- 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 3498 (class 2604 OID 16469)
```

```
-- 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 3499 (class 2604 OID 16470)
```

```
-- 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 3500 (class 2604 OID 16471)  
  
-- 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 3501 (class 2604 OID 16472)  
  
-- 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 3502 (class 2604 OID 16473)  
  
-- 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 3503 (class 2604 OID 16474)
```

```
-- 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 3504 (class 2604 OID 16475)

-- 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 3505 (class 2604 OID 16476)

-- Name: Distribution_of_work ID_distribution_of_work; Type: DEFAULT; Schema: public;
Owner: postgres

--

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

--

-- TOC entry 3506 (class 2604 OID 16477)

-- 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 3507 (class 2604 OID 16478)
-- 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 3508 (class 2604 OID 16479)
-- 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 3509 (class 2604 OID 16480)
-- 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 3711 (class 0 OID 16421)
-- Dependencies: 215
-- 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	МЩ999Н	1	1	1

\.

--

-- TOC entry 3713 (class 0 OID 16425)

-- Dependencies: 217

-- Data for Name: Car\_workshop; Type: TABLE DATA; Schema: public; Owner: postgres

--

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

Ломоносова, 9	Saint-Petersburg	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 3715 (class 0 OID 16429)
-- Dependencies: 219
-- 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

\.
```

--

-- TOC entry 3717 (class 0 OID 16433)

-- Dependencies: 221

-- 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
2023-10-12	В процессе	Оплачен	2023-10-14	2023-10-17	4	4	4	\N	\N
2023-10-13	Заказан	Оплачен	2023-10-15	2023-10-18	5	5	5	\N	\N
2023-10-14	В процессе	Оплачен	2023-10-16	2023-10-19	6	6	6	\N	\N
2023-10-15	Заказан	Не оплачен	2023-10-17	2023-10-20	7	7	7	\N	\N
2023-10-16	В процессе	Оплачен	2023-10-18	2023-10-21	8	8	8	\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
2023-10-19	Заказан	Оплачен	2023-10-21	2023-10-24	11	11	11	\N	\N
2023-10-24	Заказан	Не оплачен	2023-10-24	2023-11-24	1	1	1	\N	\N

```

\.

--
-- TOC entry 3719 (class 0 OID 16437)
-- Dependencies: 223
-- 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      \N      Германия          3
Масляный фильтр        \N      Китай              4
Свеча зажигания        \N      США                5
Воздушный фильтр       \N      Германия          6
Моторное масло         46395   Россия            7
Антифриз               17957   Китай              8
Топливный фильтр       \N      Германия          9
Ремень ГРМ             28848   Россия           10
Передний фонарь        19397   Германия          11

\.

--
-- TOC entry 3721 (class 0 OID 16441)
-- Dependencies: 225
-- 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 3723 (class 0 OID 16445)
```

```
-- Dependencies: 227
```

```
-- 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 3725 (class 0 OID 16449)
```

```
-- Dependencies: 229
```

```
-- 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_distribution_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 3727 (class 0 OID 16453)

-- Dependencies: 231

-- 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

\.
```

--

```
-- TOC entry 3729 (class 0 OID 16457)
-- Dependencies: 233
-- 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 3731 (class 0 OID 16461)
-- Dependencies: 235
-- 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 3733 (class 0 OID 16465)
```

```
-- Dependencies: 237
```

```
-- 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 reapi	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 3752 (class 0 OID 0)
-- Dependencies: 216
-- 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 3753 (class 0 OID 0)
-- Dependencies: 218
-- 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 3754 (class 0 OID 0)

-- Dependencies: 220

-- 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 3755 (class 0 OID 0)

-- Dependencies: 222

-- 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 3756 (class 0 OID 0)

-- Dependencies: 224

-- 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 3757 (class 0 OID 0)

-- Dependencies: 226

-- 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 3758 (class 0 OID 0)
-- Dependencies: 228
-- 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 3759 (class 0 OID 0)
-- Dependencies: 230
-- Name: Distribution_of_work_ID_distribution_of_work_seq; Type: SEQUENCE SET; Schema:
public; Owner: postgres
--

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

--
-- TOC entry 3760 (class 0 OID 0)
-- Dependencies: 232
-- 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 3761 (class 0 OID 0)

-- Dependencies: 234

-- 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 3762 (class 0 OID 0)

-- Dependencies: 236

-- 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 3763 (class 0 OID 0)

-- Dependencies: 238

-- 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 3510 (class 2606 OID 16481)

-- 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 3526 (class 2606 OID 16483)
-- 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 3528 (class 2606 OID 16485)
-- 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 3511 (class 2606 OID 16486)
-- 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 3530 (class 2606 OID 16488)
-- 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 3532 (class 2606 OID 16490)
-- 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 3534 (class 2606 OID 16492)
-- 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 3515 (class 2606 OID 16493)
-- 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 3516 (class 2606 OID 16494)
-- 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 3517 (class 2606 OID 16495)
-- 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 3536 (class 2606 OID 16497)
-- 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 3518 (class 2606 OID 16498)
-- 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 3540 (class 2606 OID 16500)
-- 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 3538 (class 2606 OID 16502)
-- 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 3542 (class 2606 OID 16504)
-- 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 3519 (class 2606 OID 16505)
-- 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 3520 (class 2606 OID 16506)
-- 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 3544 (class 2606 OID 16508)
-- 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_distribution_of_work");

```



```
--
-- TOC entry 3521 (class 2606 OID 16510)
-- 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 3546 (class 2606 OID 16512)
-- 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 3522 (class 2606 OID 16513)
-- 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 3523 (class 2606 OID 16514)
```

```
-- 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 3548 (class 2606 OID 16516)
-- 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 3524 (class 2606 OID 16517)
-- 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 3550 (class 2606 OID 16519)
-- 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 3552 (class 2606 OID 16521)
-- 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 3512 (class 2606 OID 16522)
-- 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 3513 (class 2606 OID 16523)
-- 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 3514 (class 2606 OID 16524)

-- 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 3555 (class 2606 OID 16525)

-- 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 3566 (class 2606 OID 16530)

-- 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 3553 (class 2606 OID 16535)

-- 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 3556 (class 2606 OID 16540)
```

```
-- 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 3558 (class 2606 OID 16545)
```

```
-- 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 3563 (class 2606 OID 16550)
```

```
-- 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 3559 (class 2606 OID 16555)
-- 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 3561 (class 2606 OID 16560)
-- 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 3564 (class 2606 OID 16565)
-- 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 3562 (class 2606 OID 16570)

```

```

-- 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_distribution_of_work") NOT VALID;

--

-- TOC entry 3557 (class 2606 OID 16575)

-- 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 3567 (class 2606 OID 16580)

-- 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 3554 (class 2606 OID 16585)

-- 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 3560 (class 2606 OID 16590)

-- 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 3565 (class 2606 OID 16595)

-- 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 2024-03-04 15:40:08 MSK

--

-- 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.