Отчёт

по лабораторной работе №3 «Создание таблиц базы данных PostgreSQL. Заполнение таблиц рабочими данными»

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

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ИТМО

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Оглавление

Цель работы

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

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.
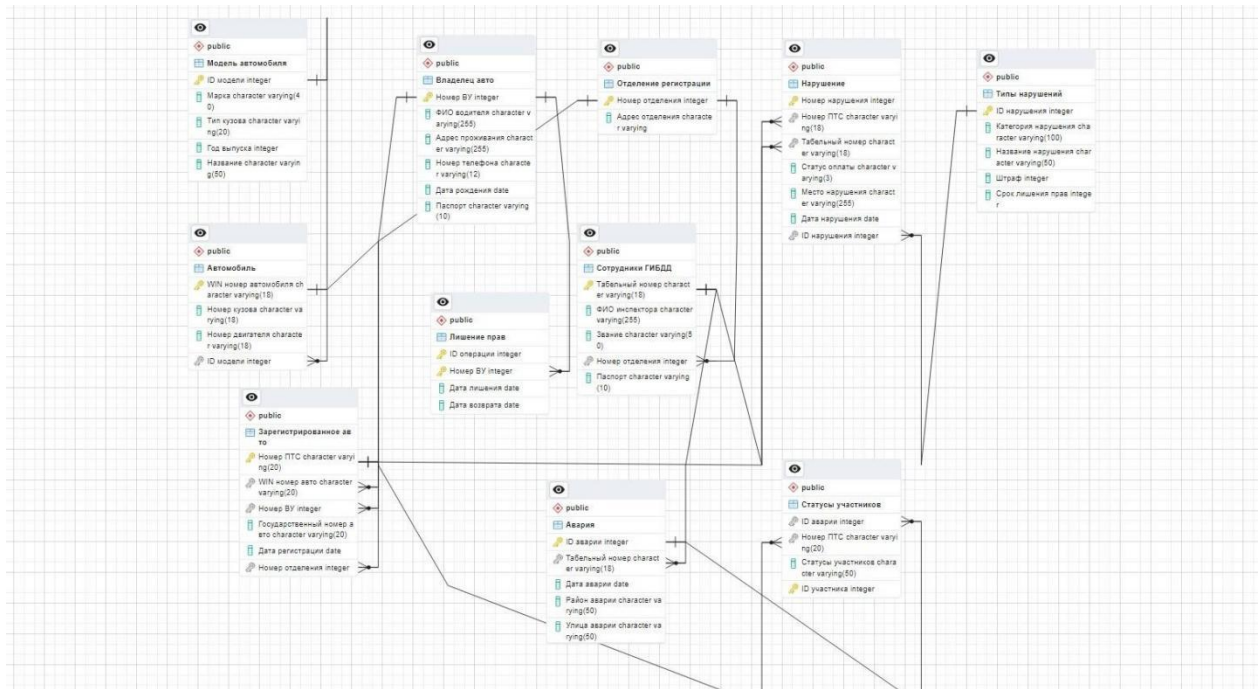6. Создать резервную копию БД.

   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.

Вариант 18. БД «ГИБДД»

Листинг кода для Plain DB Restore

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


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


-- Started on 2023-11-13 16:23:48

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;

DROP DATABASE IF EXISTS "GIBDD";
--
-- TOC entry 4891 (class 1262 OID 16398)
-- Name: GIBDD; Type: DATABASE; Schema: -; Owner: postgres
--
```

```sql
CREATE DATABASE "GIBDD" WITH TEMPLATE = template0 ENCODING = 'UTF8' LOCALE_PROVIDER =
libc LOCALE = 'English_United States.1252';


ALTER DATABASE "GIBDD" OWNER TO postgres;

\connect "GIBDD"

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 220 (class 1259 OID 16433)
-- Name: Car; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Car" (
    "WIN_number" character varying(18) NOT NULL,
    "Engine_number" character varying(18) NOT NULL,
    "Model_ID" integer NOT NULL
);


ALTER TABLE public."Car" OWNER TO postgres;

--
-- TOC entry 217 (class 1259 OID 16411)
-- Name: Car_model; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Car_model" (
    "Model_ID" integer NOT NULL,
    "Label" character varying(40) NOT NULL,
    "Body_type" character varying(20) NOT NULL,
    "Year_of_release" integer NOT NULL,
    "Name" character varying(50) NOT NULL
);
```

```sql
ALTER TABLE public."Car_model" OWNER TO postgres;


--
-- TOC entry 222 (class 1259 OID 16524)
-- Name: Crash; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Crash" (
    "Crash_ID" integer NOT NULL,
    "Service_number" character varying(18) NOT NULL,
    "Crash_date" date NOT NULL,
    "Crah_district" character varying(50) NOT NULL,
    "Crash_street" character varying(50) NOT NULL
);


ALTER TABLE public."Crash" OWNER TO postgres;


--
-- TOC entry 225 (class 1259 OID 16609)
-- Name: Participants_status; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Participants_status" (
    "Crash_ID" integer NOT NULL,
    "PTS_number" character varying(20) NOT NULL,
    "Participants_status" character varying(50) NOT NULL,
    "Participants_ID" integer NOT NULL
);


ALTER TABLE public."Participants_status" OWNER TO postgres;


--
-- TOC entry 219 (class 1259 OID 16421)
-- Name: Police department; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Police department" (
    "Department_ID" integer NOT NULL,
    "Department_adress" character varying NOT NULL
);


ALTER TABLE public."Police department" OWNER TO postgres;


--
-- TOC entry 218 (class 1259 OID 16416)
-- Name: Policemen; Type: TABLE; Schema: public; Owner: postgres
--
```

```sql
CREATE TABLE public."Policemen" (
    "Personal_number" character varying(18) NOT NULL,
    "Policeman_name_surname" character varying(255) NOT NULL,
    "Rank" character varying(50) NOT NULL,
    "Department_ID" integer NOT NULL,
    "Passport" character varying(15)
);


ALTER TABLE public."Policemen" OWNER TO postgres;


--
-- TOC entry 221 (class 1259 OID 16443)
-- Name: Rights deprivation; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Rights deprivation" (
    "Procedure_ID" integer NOT NULL,
    "DL number" integer NOT NULL,
    "Loss_date" date NOT NULL,
    "Return_date" date NOT NULL
);


ALTER TABLE public."Rights deprivation" OWNER TO postgres;


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

CREATE TABLE public."Violation_types" (
    "Violation_ID" integer  NOT  NULL,
    "Violation_type" character varying(100) NOT NULL,
    "Violation_name" character varying(500) NOT NULL,
    "Penalty" integer,
    "DL_loss_time" integer
);


ALTER TABLE public."Violation_types" OWNER TO postgres;


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

CREATE TABLE public.car_owner (
    "DL_number" integer NOT NULL,
    "Driver_name_surname" character varying(255) NOT NULL,
    "Adress" character varying(255) NOT NULL,
```

```sql
    "Telephone_number" character varying(15) NOT NULL,
    "Date_of_birth" date NOT NULL,
    "Passport" character varying(15)
);


ALTER TABLE public.car_owner OWNER TO postgres;


--
-- TOC entry 224 (class 1259 OID 16565)
-- Name: registered_car; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public.registered_car (
    "PTS_number" character varying(20) NOT NULL,
    "WIN_number" character varying(20) NOT NULL,
    "DL_number" integer NOT NULL,
    "Car_number" character varying(20) NOT NULL,
    "Registration_date" date NOT NULL,
    "Department_ID" integer NOT NULL
);


ALTER TABLE public.registered_car OWNER TO postgres;


--
-- TOC entry 228 (class 1259 OID 16683)
-- Name: accident_participants_view; Type: VIEW; Schema: public; Owner: postgres
--

CREATE VIEW public.accident_participants_view AS
 SELECT co."DL_number" AS "Driver_License_Number",
    co."Driver_name_surname" AS "Driver_Name_Surname",
    co."Adress" AS "Driver_Address",
    co."Telephone_number" AS "Driver_Telephone",
    co."Date_of_birth" AS "Driver_Date_of_Birth",
    co."Passport" AS "Driver_Passport",
    rc."Car_number" AS "Car_Number",
    rc."Registration_date" AS "Car_Registration_Date",
    ps."Participants_status" AS "Participant_Status",
    a."Crash_date" AS "Accident_Date",
    a."Crah_district" AS "Accident_District",
    a."Crash_street" AS "Accident_Street"
   FROM (((public.car_owner co
     JOIN public.registered_car rc ON ((co."DL_number" = rc."DL_number")))
     JOIN public."Participants_status" ps ON (((rc."PTS_number")::text =
(ps."PTS_number")::text)))
     JOIN public."Crash" a ON ((ps."Crash_ID" = a."Crash_ID")))
  WHERE ((ps."Participants_status" IS NOT NULL) AND ((a."Crash_date" >= '2023-11-
01'::date) AND (a."Crash_date" <= '2023-12-01'::date)));
```

```sql
ALTER VIEW public.accident_participants_view OWNER TO postgres;


--
-- TOC entry 223 (class 1259 OID 16539)
-- Name: violation; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public.violation (
    "Violation_ID" integer NOT NULL,
    "PTS_number" character varying(18) NOT NULL,
    "Personal_number" character varying(18) NOT NULL,
    "Violation_place" character varying(255) NOT NULL,
    "Violation_date" date NOT NULL,
    "Violation_id" integer  NOT  NULL,
    "Violation_time" time without time zone NOT NULL,
    "Payment_status" integer
);


ALTER TABLE public.violation OWNER TO postgres;

--
-- TOC entry 226 (class 1259 OID 16663)
-- Name: violation_summary_remake2; Type: VIEW; Schema: public; Owner: postgres
--

CREATE VIEW public.violation_summary_remake2 AS
 SELECT co."DL_number" AS "DL_Number",
    sum(vt."Penalty") AS "Total_Penalty"
   FROM (((public.violation v
     JOIN public."Violation_types" vt ON ((v."Violation_id" = vt."Violation_ID")))
     JOIN public.registered_car rc ON (((v."PTS_number")::text =
(rc."PTS_number")::text)))
     JOIN public.car_owner co ON ((rc."DL_number" = co."DL_number")))
  WHERE ((v."Violation_date" >= '2023-02-15'::date) AND (v."Violation_date" <= '2024-
02-15'::date))
  GROUP BY co."DL_number";


ALTER VIEW public.violation_summary_remake2 OWNER TO postgres;

--
-- TOC entry 227 (class 1259 OID 16668)
-- Name: violation_summary_remake3; Type: VIEW; Schema: public; Owner: postgres
--

CREATE VIEW public.violation_summary_remake3 AS
 SELECT co."DL_number" AS "DL_Number",
    vt."Violation_type" AS "Violation_Type",
    v."Violation_date" AS "Violation_Date",
    sum(vt."Penalty") AS "Total_Penalty"
```

```sql
    FROM (((public.violation v
      JOIN public."Violation_types" vt ON ((v."Violation_id" = vt."Violation_ID")))
      JOIN public.registered_car rc ON (((v."PTS_number")::text =
(rc."PTS_number")::text)))
      JOIN public.car_owner co ON ((rc."DL_number" = co."DL_number")))
  WHERE ((v."Violation_date" >= '2023-02-15'::date) AND (v."Violation_date" <= '2024-
02-15'::date))
  GROUP BY co."DL_number", vt."Violation_type", v."Violation_date";


ALTER VIEW public.violation_summary_remake3 OWNER TO postgres;

--
-- TOC entry 4880 (class 0 OID 16433)
-- Dependencies: 220
-- Data for Name: Car; Type: TABLE DATA; Schema: public; Owner: postgres
--

INSERT INTO public."Car" VALUES ('123QWE456', '321567Q', 1) ON CONFLICT DO NOTHING;
INSERT INTO public."Car" VALUES ('JH4KA4650L', 'SC36E-1000324', 2) ON CONFLICT DO
NOTHING;
INSERT INTO public."Car" VALUES ('1FUJA6CV', '284476A', 2) ON CONFLICT DO NOTHING;
INSERT INTO public."Car" VALUES ('456QWE123', '028103373N', 3) ON CONFLICT DO NOTHING;
INSERT INTO public."Car" VALUES ('WIN123456789', '12345678', 4) ON CONFLICT DO
NOTHING;


--
-- TOC entry 4877 (class 0 OID 16411)
-- Dependencies: 217
-- Data for Name: Car_model; Type: TABLE DATA; Schema: public; Owner: postgres
--

INSERT INTO public."Car_model" VALUES (1, 'BMW', 'Седан', 2003, 'BMW 5 e39') ON
CONFLICT DO NOTHING;
INSERT INTO public."Car_model" VALUES (2, 'BMW
', 'Седан
', 2005, 'BMW 3 e46') ON CONFLICT DO NOTHING;
INSERT INTO public."Car_model" VALUES (3, 'Audi
', 'Хетчбек
', 2013, 'Audi A3 (8P)') ON CONFLICT DO NOTHING;
INSERT INTO public."Car_model" VALUES (4, 'Nissan
', 'Хетчбек', 2014, 'Nissan quasqai') ON CONFLICT DO NOTHING;
INSERT INTO public."Car_model" VALUES (5, 'Nissan
', 'Хетчбек', 2016, 'Nissan tiida
') ON CONFLICT DO NOTHING;


--
-- TOC entry 4882 (class 0 OID 16524)
-- Dependencies: 222
```

```sql
-- Data for Name: Crash; Type: TABLE DATA; Schema: public; Owner: postgres
--

INSERT INTO public."Crash" VALUES (1, '2', '2023-11-15', 'Центральный', 'Марата 17')
ON CONFLICT DO NOTHING;


--
-- TOC entry 4885 (class 0 OID 16609)
-- Dependencies: 225
-- Data for Name: Participants_status; Type: TABLE DATA; Schema: public; Owner:
postgres
--

INSERT INTO public."Participants_status" VALUES (1, '02KP362311', '1', 1) ON CONFLICT
DO NOTHING;
INSERT INTO public."Participants_status" VALUES (1, '03ET23145', '0', 2) ON CONFLICT
DO NOTHING;


--
-- TOC entry 4879 (class 0 OID 16421)
-- Dependencies: 219
-- Data for Name: Police department; Type: TABLE DATA; Schema: public; Owner: postgres
--

INSERT INTO public."Police department" VALUES (1, 'Кронверкский проспект 49') ON
CONFLICT DO NOTHING;
INSERT INTO public."Police department" VALUES (2, 'Улица Ломоносова 9М') ON CONFLICT
DO NOTHING;


--
-- TOC entry 4878 (class 0 OID 16416)
-- Dependencies: 218
-- Data for Name: Policemen; Type: TABLE DATA; Schema: public; Owner: postgres
--

INSERT INTO public."Policemen" VALUES ('1', 'Деревсков Денис Климентьевич', 'Сержант',
1, '4063 170339') ON CONFLICT DO NOTHING;
INSERT INTO public."Policemen" VALUES ('2', 'Левтев Ефим Степанович', 'Рядовой
', 1, '4978 568220') ON CONFLICT DO NOTHING;
INSERT INTO public."Policemen" VALUES ('3', 'Веточкин Яков Никифорович', 'Майор
', 2, '4777 684175') ON CONFLICT DO NOTHING;


--
-- TOC entry 4881 (class 0 OID 16443)
-- Dependencies: 221
-- Data for Name: Rights deprivation; Type: TABLE DATA; Schema: public; Owner:
postgres
```

```sql
--

INSERT INTO public."Rights deprivation" VALUES (1, 1234567, '2023-11-03', '2024-11-
03') ON CONFLICT DO NOTHING;
INSERT INTO public."Rights deprivation" VALUES (2, 1234566, '2023-11-06', '2024-11-
06') ON CONFLICT DO NOTHING;


--
-- TOC entry 4875 (class 0 OID 16399)
-- Dependencies: 215
-- Data for Name: Violation_types; Type: TABLE DATA; Schema: public; Owner: postgres
--

INSERT INTO public."Violation_types" VALUES (4, 'Неисправности автомобиля', 'Наезд на
сплошную', 5000, 12) ON CONFLICT DO NOTHING;
INSERT INTO public."Violation_types" VALUES (1, 'Отсутствие документов и регистрации
автомобиля', 'Управление транспортным средством, не зарегистрированным в установленном
порядке', 800, NULL) ON CONFLICT DO NOTHING;
INSERT INTO public."Violation_types" VALUES (3, 'Отсутствие документов и регистрации
автомобиля', 'Управление транспортным средством, на котором установлены стекла (в том
числе покрытые прозрачными цветными пленками), светопропускание которых не
соответствует требованиям технического регламента о безопасности колесных транспортных
средств', 500, NULL) ON CONFLICT DO NOTHING;
INSERT INTO public."Violation_types" VALUES (2, 'Отсутствие документов и регистрации
автомобиля', 'Передача управления транспортным средством лицу, не имеющему при себе
документов на право управления им', 0, 3) ON CONFLICT DO NOTHING;


--
-- TOC entry 4876 (class 0 OID 16404)
-- Dependencies: 216
-- Data for Name: car_owner; Type: TABLE DATA; Schema: public; Owner: postgres
--

INSERT INTO public.car_owner VALUES (1234567, 'Иванов Иван Иванович', 'Серебряный
бульвар 12', '+79650897834', '2001-12-03', '4018 134534') ON CONFLICT DO NOTHING;
INSERT INTO public.car_owner VALUES (1234565, 'Михайлов Иван Иванович
', 'Проспект ветеранов к153', '+79656578501', '2001-03-21', '4618 147216') ON CONFLICT
DO NOTHING;
INSERT INTO public.car_owner VALUES (1234566, 'Сергеев Иван Иванович', 'Биржевая Улица
14
', '+79657005804', '1996-05-03', '4745 501529') ON CONFLICT DO NOTHING;
INSERT INTO public.car_owner VALUES (1234569, 'Залетов Артём Дмитриевич', 'Улица
Ленина 15', '+79652329401', '1998-02-02', '4680 471692') ON CONFLICT DO NOTHING;
INSERT INTO public.car_owner VALUES (1234568, 'Сергеев Сергей Сергеевич', 'Улица
Марата 13
', '+79652692357
', '2000-11-04', '4224 941017') ON CONFLICT DO NOTHING;
```

```sql
--
-- TOC entry 4884 (class 0 OID 16565)
-- Dependencies: 224
-- Data for Name: registered_car; Type: TABLE DATA; Schema: public; Owner: postgres
--

INSERT INTO public.registered_car VALUES ('02KP362311', '123QWE456', 1234567,
'E100BK37', '2023-03-11', 1) ON CONFLICT DO NOTHING;
INSERT INTO public.registered_car VALUES ('03ET23145', '1FUJA6CV', 1234565,
'У187EK37', '2023-03-12', 2) ON CONFLICT DO NOTHING;
INSERT INTO public.registered_car VALUES ('04УЕ32664', '456QWE123', 1234566,
'O716CA178', '2023-03-15', 2) ON CONFLICT DO NOTHING;


--
-- TOC entry 4883 (class 0 OID 16539)
-- Dependencies: 223
-- Data for Name: violation; Type: TABLE DATA; Schema: public; Owner: postgres
--

INSERT INTO public.violation VALUES (3, '03ET23145', '2', 'Серебристый бульвар 35
', '2023-11-03', 3, '21:00:00', 1) ON CONFLICT DO NOTHING;
INSERT INTO public.violation VALUES (1, '02KP362311', '1', 'Загородный проспект 15',
'2023-11-02', 1, '05:03:00', 1) ON CONFLICT DO NOTHING;
INSERT INTO public.violation VALUES (2, '02KP362311', '1', 'Гражданский проспект 24',
'2023-11-07', 2, '04:21:00', NULL) ON CONFLICT DO NOTHING;
INSERT INTO public.violation VALUES (4, '04УЕ32664', '1', 'Звенигородская улица 22',
'2023-11-06', 2, '07:03:21', NULL) ON CONFLICT DO NOTHING;


--
-- TOC entry 4694 (class 2606 OID 16415)
-- Name: Car_model Car_model_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Car_model"
    ADD CONSTRAINT "Car_model_pkey" PRIMARY KEY ("Model_ID");


--
-- TOC entry 4689 (class 2606 OID 16586)
-- Name: car_owner Car_owner_DL number_key; Type: CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public.car_owner
    ADD CONSTRAINT "Car_owner_DL number_key" UNIQUE ("DL_number") INCLUDE
("DL_number");


--
```

```sql
-- TOC entry 4691 (class 2606 OID 16410)
-- Name: car_owner Car_owner_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public.car_owner
    ADD CONSTRAINT "Car_owner_pkey" PRIMARY KEY ("DL_number");



--
-- TOC entry 4703 (class 2606 OID 16437)
-- Name: Car Car_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Car"
    ADD CONSTRAINT "Car_pkey" PRIMARY KEY ("WIN_number");



--
-- TOC entry 4709 (class 2606 OID 16601)
-- Name: Crash Crash_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Crash"
    ADD CONSTRAINT "Crash_pkey" PRIMARY KEY ("Crash_ID") INCLUDE ("Crash_ID");



--
-- TOC entry 4707 (class 2606 OID 16447)
-- Name: Rights deprivation DL_loss_pkey; Type: CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Rights deprivation"
    ADD CONSTRAINT "DL_loss_pkey" PRIMARY KEY ("Procedure_ID", "DL number");



--
-- TOC entry 4701 (class 2606 OID 16427)
-- Name: Police department Department_pkey; Type: CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Police department"
    ADD CONSTRAINT "Department_pkey" PRIMARY KEY ("Department_ID");



--
-- TOC entry 4711 (class 2606 OID 16608)
-- Name: violation PTS number; Type: CONSTRAINT; Schema: public; Owner: postgres
--
```

```sql
ALTER TABLE ONLY public.violation
    ADD CONSTRAINT "PTS number" PRIMARY KEY ("Violation_ID") INCLUDE ("Violation_ID");


--
-- TOC entry 4716 (class 2606 OID 16632)
-- Name: Participants_status Participant ID; Type: CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Participants_status"
    ADD CONSTRAINT "Participant ID" PRIMARY KEY ("Participants_ID") INCLUDE
("Participants_ID");


--
-- TOC entry 4696 (class 2606 OID 16592)
-- Name: Policemen Personal number; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Policemen"
    ADD CONSTRAINT "Personal number" UNIQUE ("Personal_number") INCLUDE
("Personal_number");


--
-- TOC entry 4698 (class 2606 OID 16507)
-- Name: Policemen Policemans_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Policemen"
    ADD CONSTRAINT "Policemans_pkey" PRIMARY KEY ("Personal_number");


--
-- TOC entry 4713 (class 2606 OID 16569)
-- Name: registered_car Registered_car_pkey; Type: CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public.registered_car
    ADD CONSTRAINT "Registered_car_pkey" PRIMARY KEY ("PTS_number");



--
-- TOC entry 4686 (class 2606 OID 16403)
-- Name: Violation_types Violation_types_pkey; Type: CONSTRAINT; Schema: public;
Owner: postgres
--

ALTER TABLE ONLY public."Violation_types"
```

```sql
    ADD CONSTRAINT "Violation_types_pkey" PRIMARY KEY ("Violation_ID");


--
-- TOC entry 4705 (class 2606 OID 16594)
-- Name: Car WIN; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Car"
    ADD CONSTRAINT "WIN" UNIQUE ("WIN_number") INCLUDE ("WIN_number");



--
-- TOC entry 4692 (class 1259 OID 16688)
-- Name: idx_dl_number_co; Type: INDEX; Schema: public; Owner: postgres
--

CREATE INDEX idx_dl_number_co ON public.car_owner USING btree ("DL_number");


--
-- TOC entry 4714 (class 1259 OID 16689)
-- Name: idx_dl_number_rc; Type: INDEX; Schema: public; Owner: postgres
--

CREATE INDEX idx_dl_number_rc ON public.registered_car USING btree ("DL_number");


--
-- TOC entry 4699 (class 1259 OID 16691)
-- Name: idx_policeman_name; Type: INDEX; Schema: public; Owner: postgres
--

CREATE INDEX idx_policeman_name ON public."Policemen" USING btree
("Policeman_name_surname");


--
-- TOC entry 4687 (class 1259 OID 16690)
-- Name: idx_violation_name; Type: INDEX; Schema: public; Owner: postgres
--

CREATE INDEX idx_violation_name ON public."Violation_types" USING btree
("Violation_name");


--
-- TOC entry 4727 (class 2606 OID 16619)
-- Name: Participants_status Crash ID; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--
```

```sql
ALTER TABLE ONLY public."Participants_status"
    ADD CONSTRAINT "Crash ID" FOREIGN KEY ("Crash_ID") REFERENCES
public."Crash"("Crash_ID");


--
-- TOC entry 4719 (class 2606 OID 16448)
-- Name: Rights deprivation DL number; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Rights deprivation"
    ADD CONSTRAINT "DL number" FOREIGN KEY ("DL number") REFERENCES
public.car_owner("DL_number");


--
-- TOC entry 4724 (class 2606 OID 16575)
-- Name: registered_car DL number; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public.registered_car
    ADD CONSTRAINT "DL number" FOREIGN KEY ("DL_number") REFERENCES
public.car_owner("DL_number");


--
-- TOC entry 4717 (class 2606 OID 16428)
-- Name: Policemen Department ID; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Policemen"
    ADD CONSTRAINT "Department ID" FOREIGN KEY ("Department_ID") REFERENCES
public."Police department"("Department_ID") NOT VALID;


--
-- TOC entry 4725 (class 2606 OID 16580)
-- Name: registered_car Department ID; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public.registered_car
    ADD CONSTRAINT "Department ID" FOREIGN KEY ("Department_ID") REFERENCES
public."Police department"("Department_ID");


--
-- TOC entry 4718 (class 2606 OID 16438)
-- Name: Car Model_id; Type: FK CONSTRAINT; Schema: public; Owner: postgres
```

```sql
--

ALTER TABLE ONLY public."Car"
    ADD CONSTRAINT "Model_id" FOREIGN KEY ("Model_ID") REFERENCES
public."Car_model"("Model_ID");


--
-- TOC entry 4728 (class 2606 OID 16614)
-- Name: Participants_status PTS; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Participants_status"
    ADD CONSTRAINT "PTS" FOREIGN KEY ("PTS_number") REFERENCES
public.registered_car("PTS_number");


--
-- TOC entry 4721 (class 2606 OID 16549)
-- Name: violation Personal number; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public.violation
    ADD CONSTRAINT "Personal number" FOREIGN KEY ("Personal_number") REFERENCES
public."Policemen"("Personal_number");


--
-- TOC entry 4722 (class 2606 OID 16554)
-- Name: violation Violation ID; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public.violation
    ADD CONSTRAINT "Violation ID" FOREIGN KEY ("Violation_id") REFERENCES
public."Violation_types"("Violation_ID");


--
-- TOC entry 4723 (class 2606 OID 16602)
-- Name: violation Violation PTS; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public.violation
    ADD CONSTRAINT "Violation PTS" FOREIGN KEY ("PTS_number") REFERENCES
public.registered_car("PTS_number") NOT VALID;


--
-- TOC entry 4726 (class 2606 OID 16570)
```

```sql
-- Name: registered_car WIN number; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--
                                   19

ALTER TABLE ONLY public.registered_car
    ADD CONSTRAINT "WIN number" FOREIGN KEY ("WIN_number") REFERENCES
public."Car"("WIN_number");



--
-- TOC entry 4720 (class 2606 OID 16534)
-- Name: Crash Табельный номер; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Crash"
    ADD CONSTRAINT "Табельный номер" FOREIGN KEY ("Service_number") REFERENCES
public."Policemen"("Personal_number");


-- Completed on 2023-11-13 16:23:49

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

■

Листинг кода для Custom DB restore

```
toc.dat 0000600 0004000 0002000 00000042504 14521206600 0014440
0ustar 00postgres postgres 0000000 0000000 PGDMP , !%  7
/
{ " GIBDD ! 16.0! 16.04"0   0  0% ENCODING % ENCODING   - SET client encoding =
'UTF8';
                  " false   #0   0   0
STDSTRINGS
STDSTRINGS   ( SET standard_conforming_strings = 'on';
                  " false   $0   0   0
SEARCHPATH
SEARCHPATH   8 SELECT pg_catalog.set_config('search_path', '', false);
                  " false   %0 ! 1262 " 16398 " GIBDD % DATABASE   �CREATE
DATABASE "GIBDD" WITH TEMPLATE = template0 ENCODING = 'UTF8' LOCALE_PROVIDER =
libc LOCALE = 'English_United States.1252';
4 DROP DATABASE "GIBDD";
            % postgres " false   �! 1259" 16433  Car " TABLE   �CREATE TABLE
public."Car" (
    "WIN number" character varying(18) NOT NULL,
    "Engine number" character varying(18) NOT NULL,
    "ID model" integer NOT NULL
);
6 DROP TABLE public."Car";
```

```
    # public ! heap % postgres " false    �! 1259" 16411
Car_model " TABLE    �CREATE TABLE public."Car_model" (
    "Model ID" integer NOT NULL,
    "Label" character varying(40) NOT NULL,
    "Body type" character varying(20) NOT NULL,
    "Year of release" integer NOT NULL,
    "Name" character varying(50) NOT NULL
);
 DROP TABLE public."Car_model";
    # public ! heap % postgres " false    �! 1259" 16404
Car_owner " TABLE    /  CREATE TABLE public."Car_owner" (
    "DL number" integer NOT NULL,
    "Driver_name_surname" character varying(255) NOT NULL,
    "Adress" character varying(255) NOT NULL,
    "Telephone number" character varying(15) NOT NULL,
    "Date of birth" date NOT NULL,
    "Passport" character varying(15)
);
 DROP TABLE public."Car_owner";
    # public ! heap % postgres " false    �! 1259" 16524" Crash " TABLE    �CREATE
TABLE public."Crash" (
    "Crash ID" integer NOT NULL,
    "Service_number" character varying(18) NOT NULL,
    "Crash_date" date NOT NULL,
    "Crah_district" character varying(50) NOT NULL,
    "Crash_street" character varying(50) NOT NULL
);
8 DROP TABLE public."Crash";
    # public ! heap % postgres " false    �! 1259" 166090 Participants
status " TABLE    �CREATE TABLE public."Participants status" (
    "Crash_ID" integer NOT NULL,
    "PTS number" character varying(20) NOT NULL,
    "Participants status" character varying(50) NOT NULL,
    "Participants_ID" integer NOT NULL
);
) DROP TABLE public."Participants status";
    # public ! heap % postgres " false    �! 1259" 16421. Police
department " TABLE    �CREATE TABLE public."Police department" (
    "Department_ID" integer NOT NULL,
    "Department_adress" character varying NOT NULL
);
' DROP TABLE public."Police department";
    # public ! heap % postgres " false    �! 1259" 16416
Policemen " TABLE    ,  CREATE TABLE public."Policemen" (
    "Personal number" character varying(18) NOT NULL,
    "Policeman_name_surname" character varying(255) NOT NULL,
    "Rank" character varying(50) NOT NULL,
    "Department_ID" integer NOT NULL,
    "Passport" character varying(15)
);
 DROP TABLE public."Policemen";
    # public ! heap % postgres " false    �! 1259" 16565
```

30

```
 Registered_car " TABLE   + CREATE TABLE public."Registered_car" (
    "PTS number" character varying(20) NOT NULL,
    "WIN number" character varying(20) NOT NULL,
    "DL number" integer NOT NULL,
    "Car number" character varying(20) NOT NULL,
    "Registration_date" date NOT NULL,
    "Department_ID" integer NOT NULL
);
$ DROP TABLE public."Registered_car";
    # public ! heap % postgres " false   �! 1259" 16443/ Rights
deprivation " TABLE   �CREATE TABLE public."Rights deprivation" (
    "Procedure_ID" integer NOT NULL,
    "DL number" integer NOT NULL,
    "Loss_date" date NOT NULL,
    "Return_date" date NOT NULL
);
( DROP TABLE public."Rights deprivation";
    # public ! heap % postgres " false   �! 1259" 16539
Violation " TABLE   d  CREATE TABLE public."Violation" (
    "Violation_ID" integer NOT NULL,
    "PTS number" character varying(18) NOT NULL,
    "Personal number" character varying(18) NOT NULL,
    "Payment status" character varying(3) NOT NULL,
    "Violation_place" character varying(255) NOT NULL,
    "Violation_date" date NOT NULL,
    "Violation_id" integer NOT NULL
);
 DROP TABLE public."Violation";
    # public ! heap % postgres " false   �! 1259" 16399, Violation_types " TABLE
    �CREATE TABLE public."Violation_types" (
    "Violation_ID" integer NOT NULL,
    "Violation_type" character varying(100) NOT NULL,
    "Violation_name" character varying(500) NOT NULL,
    "Penalty" integer,
    "DL_loss_time" integer NOT NULL
);
% DROP TABLE public."Violation_types";
    # public ! heap % postgres " false   �/    0" 16433  Car
TABLE DATA    J COPY public."Car" ("WIN number", "Engine number", "ID
model") FROM stdin;
# public   % postgres " false   220   % 4861.dat �/    0" 16411  Car_model
TABLE DATA      b COPY public."Car_model" ("Model ID", "Label", "Body type",
"Year of release", "Name") FROM stdin;
# public     % postgres " false   217   % 4858.dat �/    0" 16404 Car_owner
TABLE DATA        �COPY public."Car_owner" ("DL number",
"Driver_name_surname", "Adress", "Telephone number", "Date of birth",
"Passport") FROM stdin;
# public     % postgres " false   216   % 4857.dat �/    0" 16524" Crash
TABLE DATA        n COPY public."Crash" ("Crash ID", "Service_number",
"Crash_date", "Crah_district", "Crash_street") FROM stdin;
# public    % postgres " false   222   % 4863.dat  0    0 " 16609 0 Participa
nts status
TABLE DATA        s COPY public."Participants status" ("Crash_ID", "PTS
number", "Participants status", "Participants_ID") FROM stdin;
# public     % postgres " false   225   % 4866.dat �/    0" 16421. Police
department
TABLE DATA        S COPY public."Police department" ("Department_ID",
"Department_adress") FROM stdin;
# public     % postgres " false   219   % 4860.dat �/    0" 16416 Policemen
TABLE DATA      w COPY public."Policemen" ("Personal number",
"Policeman_name_surname", "Rank", "Department_ID", "Passport") FROM stdin;
# public    % postgres " false   218   % 4859.dat  0    0 " 16565
```

```
 Registered_car
TABLE DATA          �COPY public."Registered_car" ("PTS number", "WIN number",
"DL number", "Car number", "Registration_date", "Department_ID") FROM stdin;
# public      % postgres " false   224   % 4865.dat �/     0" 16443/ Rights
deprivation
TABLE DATA          g COPY public."Rights deprivation" ("Procedure_ID", "DL
number", "Loss_date", "Return_date") FROM stdin;
# public      % postgres " false   221   % 4862.dat 0    0 " 16539   Violation
TABLE DATA          �COPY public."Violation" ("Violation_ID", "PTS number",
"Personal number", "Payment status", "Violation_place", "Violation_date",
"Violation_id") FROM stdin;
# public      % postgres " false   223   % 4864.dat �/     0" 16399, Violation_
types
TABLE DATA          z COPY public."Violation_types" ("Violation_ID",
"Violation_type", "Violation_name", "Penalty", "DL_loss_time") FROM stdin;
# public      % postgres " false   215   % 4856.dat H/ ! 2606 " 16415 5 Car_mode
l Car_model_pkey
CONSTRAINT ! b ALTER TABLE ONLY public."Car_model"
    ADD CONSTRAINT "Car_model_pkey" PRIMARY KEY ("Model ID");
F ALTER TABLE ONLY public."Car_model" DROP CONSTRAINT "Car_model_pkey";
   # public      % postgres " false   217   D/ ! 2606 " 16586 " Car_owner
Car_owner_DL number__key
CONSTRAINT ! ~ ALTER TABLE ONLY public."Car_owner"
    ADD CONSTRAINT "Car_owner_DL number_key" UNIQUE ("DL number") INCLUDE ("DL
number");
P ALTER TABLE ONLY public."Car_owner" DROP CONSTRAINT "Car_owner_DL
number__key";
   # public      % postgres " false   216   F/ ! 2606 " 16410 5 Car_owner
Car_owner_pkey
CONSTRAINT ! c ALTER TABLE ONLY public."Car_owner"
    ADD CONSTRAINT "Car_owner_pkey" PRIMARY KEY ("DL number");
F ALTER TABLE ONLY public."Car_owner" DROP CONSTRAINT "Car_owner_pkey";
   # public      % postgres " false   216   P/ ! 2606 " 16437
```

```
 Car Car_pkey
CONSTRAINT ! X ALTER TABLE ONLY public."Car"
    ADD CONSTRAINT "Car_pkey" PRIMARY KEY ("WIN number");
: ALTER TABLE ONLY public."Car" DROP CONSTRAINT "Car_pkey";
    # public    % postgres " false   220   V/ ! 2606 " 16601 - Crash Crash_pkey
CONSTRAINT ! o ALTER TABLE ONLY public."Crash"
    ADD CONSTRAINT "Crash_pkey" PRIMARY KEY ("Crash ID") INCLUDE ("Crash ID");
>ALTER TABLE ONLY public."Crash" DROP CONSTRAINT "Crash_pkey";
    # public    % postgres " false   222   T/ ! 2606 " 16447 Rights deprivation
DL_loss_pkey
CONSTRAINT ! z ALTER TABLE ONLY public."Rights deprivation"
    ADD CONSTRAINT "DL_loss_pkey" PRIMARY KEY ("Procedure_ID", "DL number");
M ALTER TABLE ONLY public."Rights deprivation" DROP CONSTRAINT "DL_loss_pkey";
    # public    % postgres " false   221   221   N/ ! 2606 " 16427 ! Police
department Department_pkey
CONSTRAINT ! p ALTER TABLE ONLY public."Police department"
    ADD CONSTRAINT "Department_pkey" PRIMARY KEY ("Department_ID");
O ALTER TABLE ONLY public."Police department" DROP CONSTRAINT "Department_pkey";
    # public    % postgres " false   219   X/ ! 2606 " 16608 1 Violation PTS
number
CONSTRAINT ! { ALTER TABLE ONLY public."Violation"
    ADD CONSTRAINT "PTS number" PRIMARY KEY ("Violation_ID") INCLUDE
("Violation_ID");
B ALTER TABLE ONLY public."Violation" DROP CONSTRAINT "PTS number";
    # public    % postgres " false   223   \/ ! 2606" 16632" Participants status
Participant ID
CONSTRAINT ! �ALTER TABLE ONLY public."Participants status"
    ADD CONSTRAINT "Participant ID" PRIMARY KEY ("Participants_ID") INCLUDE
("Participants_ID");
P ALTER TABLE ONLY public."Participants status" DROP CONSTRAINT "Participant
ID";
    # public    % postgres " false   225   J/ ! 2606 " 16592 6 Policemen Personal
number
CONSTRAINT ! �ALTER TABLE ONLY public."Policemen"
    ADD CONSTRAINT "Personal number" UNIQUE ("Personal number") INCLUDE
("Personal number");
G ALTER TABLE ONLY public."Policemen" DROP CONSTRAINT "Personal number";
    # public    % postgres " false   218   L/ ! 2606 " 16507 6 Policemen
Policemans_pkey
CONSTRAINT ! j ALTER TABLE ONLY public."Policemen"
    ADD CONSTRAINT "Policemans_pkey" PRIMARY KEY ("Personal number");
G ALTER TABLE ONLY public."Policemen" DROP CONSTRAINT "Policemans_pkey";
    # public    % postgres " false   218   Z/ ! 2606 " 16569 " Registered_car
Registered_car_pkey
CONSTRAINT ! n ALTER TABLE ONLY public."Registered_car"
    ADD CONSTRAINT "Registered_car_pkey" PRIMARY KEY ("PTS number");
P ALTER TABLE ONLY public."Registered_car" DROP CONSTRAINT
"Registered_car_pkey";
    # public    % postgres " false   224   B/ ! 2606 " 16403 $ Violation_types
Violation_types_pkey
CONSTRAINT ! r ALTER TABLE ONLY public."Violation_types"
    ADD CONSTRAINT "Violation_types_pkey" PRIMARY KEY ("Violation_ID");
R ALTER TABLE ONLY public."Violation_types" DROP CONSTRAINT
"Violation_types_pkey";
    # public    % postgres " false   215   R/ ! 2606 " 16594 $ Car WIN
CONSTRAINT ! e ALTER TABLE ONLY public."Car"
    ADD CONSTRAINT "WIN" UNIQUE ("WIN number") INCLUDE ("WIN number");
5ALTER TABLE ONLY public."Car" DROP CONSTRAINT "WIN";
    # public    % postgres " false   220   g/ ! 2606 " 16619 9 Participants
status Crash ID
FK CONSTRAINT ! �ALTER TABLE ONLY public."Participants status"
    ADD CONSTRAINT "Crash ID" FOREIGN KEY ("Crash_ID") REFERENCES
public."Crash"("Crash ID");
```

```
J ALTER TABLE ONLY public."Participants status" DROP CONSTRAINT "Crash ID";
    # public      % postgres " false   222    225 ! 4694    _/ ! 2606 " 16448 9 Rig
hts deprivation DL number
FK CONSTRAINT ! �ALTER TABLE ONLY public."Rights deprivation"
    ADD CONSTRAINT "DL number" FOREIGN KEY ("DL number") REFERENCES
public."Car_owner"("DL number");
J ALTER TABLE ONLY public."Rights deprivation" DROP CONSTRAINT "DL number";
    # public      % postgres " false ! 4678   216    221    d/ ! 2606 " 16575 5 Reg
istered_car DL number
FK CONSTRAINT ! �ALTER TABLE ONLY public."Registered_car"
     ADD CONSTRAINT "DL number" FOREIGN KEY ("DL number") REFERENCES
public."Car_owner"("DL number");
F ALTER TABLE ONLY public."Registered_car" DROP CONSTRAINT "DL number";
    # public      % postgres " false   216 ! 4678    224    ]/ ! 2606" 164284 Polic
emen Department ID
FK CONSTRAINT ! �ALTER TABLE ONLY public."Policemen"
    ADD CONSTRAINT "Department ID" FOREIGN KEY ("Department_ID") REFERENCES
public."Police department"("Department_ID") NOT VALID;
E ALTER TABLE ONLY public."Policemen" DROP CONSTRAINT "Department ID";
    # public      % postgres " false   219 ! 4686    218    e/ ! 2606 " 16580 9 Reg
istered_car Department ID
FK CONSTRAINT ! �ALTER TABLE ONLY public."Registered_car"
    ADD CONSTRAINT "Department ID" FOREIGN KEY ("Department_ID") REFERENCES
public."Police department"("Department_ID");
J ALTER TABLE ONLY public."Registered_car" DROP CONSTRAINT "Department ID";
    # public      % postgres " false   224 ! 4686    219    ^/ ! 2606" 16438
```

```
 Car Model_id
FK CONSTRAINT ! �ALTER TABLE ONLY public."Car"
    ADD CONSTRAINT "Model_id" FOREIGN KEY ("ID model") REFERENCES
public."Car_model"("Model ID");
: ALTER TABLE ONLY public."Car" DROP CONSTRAINT "Model_id";
    # public       % postgres " false   220   217 ! 4680   h/ ! 2606 " 16614 4 Par
ticipants status PTS
FK CONSTRAINT ! �ALTER TABLE ONLY public."Participants status"
    ADD CONSTRAINT "PTS" FOREIGN KEY ("PTS number") REFERENCES
public."Registered_car"("PTS number");
E ALTER TABLE ONLY public."Participants status" DROP CONSTRAINT "PTS";
    # public       % postgres " false   225   224 ! 4698   a/ ! 2606 " 16549 6 Vio
lation Personal number
FK CONSTRAINT ! �ALTER TABLE ONLY public."Violation"
    ADD CONSTRAINT "Personal number" FOREIGN KEY ("Personal number") REFERENCES
public."Policemen"("Personal number");
G ALTER TABLE ONLY public."Violation" DROP CONSTRAINT "Personal number";
    # public       % postgres " false ! 4684   223   218   b/ ! 2606 " 16554 3 Vio
lation Violation ID
FK CONSTRAINT ! �ALTER TABLE ONLY public."Violation"
    ADD CONSTRAINT "Violation ID" FOREIGN KEY ("Violation_id") REFERENCES
public."Violation_types"("Violation_ID");
D ALTER TABLE ONLY public."Violation" DROP CONSTRAINT "Violation ID";
    # public       % postgres " false   215   223 ! 4674   c/ ! 2606 " 16602 4 Vio
lation Violation PTS
FK CONSTRAINT ! �ALTER TABLE ONLY public."Violation"
    ADD CONSTRAINT "Violation PTS" FOREIGN KEY ("PTS number") REFERENCES
public."Registered_car"("PTS number") NOT VALID;
E ALTER TABLE ONLY public."Violation" DROP CONSTRAINT "Violation PTS";
    # public       % postgres " false ! 4698   223   224   f/ ! 2606 " 16570 6 Reg
istered_car WIN number
FK CONSTRAINT ! �ALTER TABLE ONLY public."Registered_car"
    ADD CONSTRAINT "WIN number" FOREIGN KEY ("WIN number") REFERENCES
public."Car"("WIN number");
G ALTER TABLE ONLY public."Registered_car" DROP CONSTRAINT "WIN number";
    # public       % postgres " false ! 4688   224   220   `/ ! 2606" 16534# Crash
Табельный номер
FK CONSTRAINT ! �ALTER TABLE ONLY public."Crash"
    ADD CONSTRAINT "Табельный номер" FOREIGN KEY ("Service_number") REFERENCES
public."Policemen"("Personal number");
Q ALTER TABLE ONLY public."Crash" DROP CONSTRAINT "Табельный номер";
    # public       % postgres " false ! 4684   222   218   4861.dat 0000600
0004000 0002000 00000000166 14521206600 0014253
0ustar 00postgres postgres 0000000 0000000 1FUJA6CV74DM34063   284476A     3
JH4KA4650LC000937  SC36E-1000324  2
JH4KA2640HC004148  028103373N 1
123QWE456  321567Q     1
\.


4858.dat 0000600 0004000 0002000 00000000165 14521206600 0014260
0ustar 00postgres postgres 0000000 0000000 1    BMW    Седан  2003   BMW 5 e39
2  BMW\n  Седан\n   2005   BMW 3 e46
3  Audi\n Хетчбек\n  2013   Audi A3 (8P)
\.


4857.dat 0000600 0004000 0002000 00000001150 14521206600 0014252
0ustar 00postgres postgres 0000000 0000000 1234567 Иванов Иван Иванович
Серебряный бульвар 12  +79650897834   2001-12-03 4018 134534
1234565   Михайлов Иван Иванович\n   Проспект ветеранов к153    +79656578501
2001-03-21 4618 147216
```

1234566   Сергеев Иван Иванович Биржевая Улица 14\n   +79657005804   1996-05-
03 4745 501529
1234569   Залетов Артём Дмитриевич   Улица Ленина 15   +79652329401   1998-02-
02 4680 471692
1234568   Сергеев Сергей Сергеевич   Улица Марата 13\n +79652692357\n 2000-11-
04 4224 941017
\.

4863.dat 0000600 0004000 0002000 00000000073 14521206600 0014252
0ustar 00postgres postgres 0000000 0000000 1 2 2023-11-03 Центральный
Марата 17
\.

4866.dat 0000600 0004000 0002000 00000000030 14521206600 0014246
0ustar 00postgres postgres 0000000 0000000 1 02КР362311 1 1
\.

4860.dat 0000600 0004000 0002000 00000000132 14521206600 0014243
0ustar 00postgres postgres 0000000 0000000 1 Кронверкский проспект 49
2 Улица Ломоносова 9М
\.

4859.dat 0000600 0004000 0002000 00000000365 14521206600 0014263
0ustar 00postgres postgres 0000000 0000000 1   Деревсков Денис Климентьевич
Сержант   1 4063 170339
2 Левтев Ефим Степанович Рядовой\n 1 4978 568220
3 Веточкин Яков Никифорович Майор\n   2 4777 684175
\.

4865.dat 0000600 0004000 0002000 00000000075 14521206600 0014256
0ustar 00postgres postgres 0000000 0000000 02КР362311 123QWE456 1234567
E100ВК37   2023-03-11 1
\.

4862.dat 0000600 0004000 0002000 00000000045 14521206600 0014250
0ustar 00postgres postgres 0000000 0000000 1   1234567   2023-10-23 2023-10-24
\.

4864.dat 0000600 0004000 0002000 00000000116 14521206600 0014251
0ustar 00postgres postgres 0000000 0000000 1   02КР362311 1 0 Загородный
проспект 15 2023-11-02 1
\.

4856.dat 0000600 0004000 0002000 00000002244 14521206600 0014256
0ustar 00postgres postgres 0000000 0000000 4   Неисправности автомобиля   Наезд
на сплошную 5000   12
3 Отсутствие документов и регистрации автомобиля Управление транспортным
средством, на котором установлены стекла (в том числе покрытые прозрачными
цветными пленками), светопропускание которых не соответствует требованиям
технического регламента о безопасности колесных транспортных средств 500   0
2 Отсутствие документов и регистрации автомобиля Передача управления
транспортным средством лицу, не имеющему при себе документов на право управления
им   3000   0
1 Отсутствие документов и регистрации автомобиля Управление транспортным
средством, не зарегистрированным в установленном порядке   800   0

```
\.


restore.sql 0000600 0004000 0002000 00000035236 14521206600 0015371
0ustar 00postgres postgres 0000000 0000000 --
-- NOTE:
--
-- File paths need to be edited. Search for $$PATH$$ and
-- replace it with the path to the directory containing
-- the extracted data files.
--
--
-- PostgreSQL database dump
--


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

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;

DROP DATABASE "GIBDD";
--
-- Name: GIBDD; Type: DATABASE; Schema: -; Owner: postgres
--


CREATE DATABASE "GIBDD" WITH TEMPLATE = template0 ENCODING = 'UTF8'
LOCALE_PROVIDER = libc LOCALE = 'English_United States.1252';


ALTER DATABASE "GIBDD" OWNER TO postgres;

\connect "GIBDD"

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;


--
-- Name: Car; Type: TABLE; Schema: public; Owner: postgres
--


CREATE TABLE public."Car" (
    "WIN number" character varying(18) NOT NULL,
```

```sql
    "Engine number" character varying(18) NOT NULL,
    "ID model" integer NOT NULL
);


ALTER TABLE public."Car" OWNER TO postgres;

--
-- Name: Car_model; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Car_model" (
    "Model ID" integer NOT NULL,
    "Label" character varying(40) NOT NULL,
    "Body type" character varying(20) NOT NULL,
    "Year of release" integer NOT NULL,
    "Name" character varying(50) NOT NULL
);


ALTER TABLE public."Car_model" OWNER TO postgres;

--
-- Name: Car_owner; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Car_owner" (
    "DL number" integer NOT NULL,
    "Driver_name_surname" character varying(255) NOT NULL,
    "Adress" character varying(255) NOT NULL,
    "Telephone number" character varying(15) NOT NULL,
    "Date of birth" date NOT NULL,
    "Passport" character varying(15)
);


ALTER TABLE public."Car_owner" OWNER TO postgres;

--
-- Name: Crash; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Crash" (
    "Crash ID" integer NOT NULL,
    "Service_number" character varying(18) NOT NULL,
    "Crash_date" date NOT NULL,
    "Crah_district" character varying(50) NOT NULL,
    "Crash_street" character varying(50) NOT NULL
);


ALTER TABLE public."Crash" OWNER TO postgres;

--
-- Name: Participants status; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Participants status" (
    "Crash_ID" integer NOT NULL,
    "PTS number" character varying(20) NOT NULL,
    "Participants status" character varying(50) NOT NULL,
    "Participants_ID" integer NOT NULL
);
```

```sql
ALTER TABLE public."Participants status" OWNER TO postgres;


--
-- Name: Police department; Type: TABLE; Schema: public; Owner: postgres
--


CREATE TABLE public."Police department" (
    "Department_ID" integer NOT NULL,
    "Department_adress" character varying NOT NULL
);


ALTER TABLE public."Police department" OWNER TO postgres;


--
-- Name: Policemen; Type: TABLE; Schema: public; Owner: postgres
--


CREATE TABLE public."Policemen" (
    "Personal number" character varying(18) NOT NULL,
    "Policeman_name_surname" character varying(255) NOT NULL,
    "Rank" character varying(50) NOT NULL,
    "Department_ID" integer NOT NULL,
    "Passport" character varying(15)
);


ALTER TABLE public."Policemen" OWNER TO postgres;


--
-- Name: Registered_car; Type: TABLE; Schema: public; Owner: postgres
--


CREATE TABLE public."Registered_car" (
    "PTS number" character varying(20) NOT NULL,
    "WIN number" character varying(20) NOT NULL,
    "DL number" integer NOT NULL,
    "Car number" character varying(20) NOT NULL,
    "Registration_date" date NOT NULL,
    "Department_ID" integer NOT NULL
);


ALTER TABLE public."Registered_car" OWNER TO postgres;


--
-- Name: Rights deprivation; Type: TABLE; Schema: public; Owner: postgres
--


CREATE TABLE public."Rights deprivation" (
    "Procedure_ID" integer NOT NULL,
    "DL number" integer NOT NULL,
    "Loss_date" date NOT NULL,
    "Return_date" date NOT NULL
);


ALTER TABLE public."Rights deprivation" OWNER TO postgres;


--
-- Name: Violation; Type: TABLE; Schema: public; Owner: postgres
```

```sql
--

CREATE TABLE public."Violation" (
    "Violation_ID" integer NOT NULL,
    "PTS number" character varying(18) NOT NULL,
    "Personal number" character varying(18) NOT NULL,
    "Payment status" character varying(3) NOT NULL,
    "Violation_place" character varying(255) NOT NULL,
    "Violation_date" date NOT NULL,
    "Violation_id" integer NOT NULL
);


ALTER TABLE public."Violation" OWNER TO postgres;


--
-- Name: Violation_types; Type: TABLE; Schema: public; Owner: postgres
--

CREATE TABLE public."Violation_types" (
    "Violation_ID" integer NOT NULL,
    "Violation_type" character varying(100) NOT NULL,
    "Violation_name" character varying(500) NOT NULL,
    "Penalty" integer,
    "DL_loss_time" integer NOT NULL
);


ALTER TABLE public."Violation_types" OWNER TO postgres;


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

COPY public."Car" ("WIN number", "Engine number", "ID model") FROM stdin;
\.
COPY public."Car" ("WIN number", "Engine number", "ID model") FROM
'$$PATH$$/4861.dat';


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

COPY public."Car_model" ("Model ID", "Label", "Body type", "Year of release",
"Name") FROM stdin;
\.
COPY public."Car_model" ("Model ID", "Label", "Body type", "Year of release",
"Name") FROM '$$PATH$$/4858.dat';


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

COPY public."Car_owner" ("DL number", "Driver_name_surname", "Adress",
"Telephone number", "Date of birth", "Passport") FROM stdin;
\.
COPY public."Car_owner" ("DL number", "Driver_name_surname", "Adress",
"Telephone number", "Date of birth", "Passport") FROM '$$PATH$$/4857.dat';


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

```sql
COPY public."Crash" ("Crash ID", "Service_number", "Crash_date",
"Crah_district", "Crash_street") FROM stdin;
\.
COPY public."Crash" ("Crash ID", "Service_number", "Crash_date",
"Crah_district", "Crash_street") FROM '$$PATH$$/4863.dat';


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

COPY public."Participants status" ("Crash_ID", "PTS number", "Participants
status", "Participants_ID") FROM stdin;
\.
COPY public."Participants status" ("Crash_ID", "PTS number", "Participants
status", "Participants_ID") FROM '$$PATH$$/4866.dat';


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

COPY public."Police department" ("Department_ID", "Department_adress") FROM
stdin;
\.
COPY public."Police department" ("Department_ID", "Department_adress") FROM
'$$PATH$$/4860.dat';


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

COPY public."Policemen" ("Personal number", "Policeman_name_surname", "Rank",
"Department_ID", "Passport") FROM stdin;
\.
COPY public."Policemen" ("Personal number", "Policeman_name_surname", "Rank",
"Department_ID", "Passport") FROM '$$PATH$$/4859.dat';


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

COPY public."Registered_car" ("PTS number", "WIN number", "DL number", "Car
number", "Registration_date", "Department_ID") FROM stdin;
\.
COPY public."Registered_car" ("PTS number", "WIN number", "DL number", "Car
number", "Registration_date", "Department_ID") FROM '$$PATH$$/4865.dat';


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

COPY public."Rights deprivation" ("Procedure_ID", "DL number", "Loss_date",
"Return_date") FROM stdin;
\.
COPY public."Rights deprivation" ("Procedure_ID", "DL number", "Loss_date",
"Return_date") FROM '$$PATH$$/4862.dat';


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

```sql
COPY public."Violation" ("Violation_ID", "PTS number", "Personal number",
"Payment status", "Violation_place", "Violation_date", "Violation_id") FROM
stdin;
\.
COPY public."Violation" ("Violation_ID", "PTS number", "Personal number",
"Payment status", "Violation_place", "Violation_date", "Violation_id") FROM
'$$PATH$$/4864.dat';


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

COPY public."Violation_types" ("Violation_ID", "Violation_type",
"Violation_name", "Penalty", "DL_loss_time") FROM stdin;
\.
COPY public."Violation_types" ("Violation_ID", "Violation_type",
"Violation_name", "Penalty", "DL_loss_time") FROM '$$PATH$$/4856.dat';


--
-- Name: Car_model Car_model_pkey; Type: CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Car_model"
    ADD CONSTRAINT "Car_model_pkey" PRIMARY KEY ("Model ID");


--
-- Name: Car_owner Car_owner_DL number_key; Type: CONSTRAINT; Schema: public;
Owner: postgres
--

ALTER TABLE ONLY public."Car_owner"
    ADD CONSTRAINT "Car_owner_DL number_key" UNIQUE ("DL number") INCLUDE ("DL
number");


--
-- Name: Car_owner Car_owner_pkey; Type: CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Car_owner"
    ADD CONSTRAINT "Car_owner_pkey" PRIMARY KEY ("DL number");


--
-- Name: Car Car_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Car"
    ADD CONSTRAINT "Car_pkey" PRIMARY KEY ("WIN number");


--
-- Name: Crash Crash_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Crash"
    ADD CONSTRAINT "Crash_pkey" PRIMARY KEY ("Crash ID") INCLUDE ("Crash ID");
```

```sql
--
-- Name: Rights deprivation DL_loss_pkey; Type: CONSTRAINT; Schema: public;
Owner: postgres
--

ALTER TABLE ONLY public."Rights deprivation"
    ADD CONSTRAINT "DL_loss_pkey" PRIMARY KEY ("Procedure_ID", "DL number");


--
-- Name: Police department Department_pkey; Type: CONSTRAINT; Schema: public;
Owner: postgres
--

ALTER TABLE ONLY public."Police department"
    ADD CONSTRAINT "Department_pkey" PRIMARY KEY ("Department_ID");


--
-- Name: Violation PTS number; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Violation"
    ADD CONSTRAINT "PTS number" PRIMARY KEY ("Violation_ID") INCLUDE
("Violation_ID");


--
-- Name: Participants status Participant ID; Type: CONSTRAINT; Schema: public;
Owner: postgres
--

ALTER TABLE ONLY public."Participants status"
    ADD CONSTRAINT "Participant ID" PRIMARY KEY ("Participants_ID") INCLUDE
("Participants_ID");


--
-- Name: Policemen Personal number; Type: CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Policemen"
    ADD CONSTRAINT "Personal number" UNIQUE ("Personal number") INCLUDE
("Personal number");


--
-- Name: Policemen Policemans_pkey; Type: CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Policemen"
    ADD CONSTRAINT "Policemans_pkey" PRIMARY KEY ("Personal number");


--
-- Name: Registered_car Registered_car_pkey; Type: CONSTRAINT; Schema: public;
Owner: postgres
--

ALTER TABLE ONLY public."Registered_car"
```

```sql
    ADD CONSTRAINT "Registered_car_pkey" PRIMARY KEY ("PTS number");


--
-- Name: Violation_types Violation_types_pkey; Type: CONSTRAINT; Schema: public;
Owner: postgres
--

ALTER TABLE ONLY public."Violation_types"
    ADD CONSTRAINT "Violation_types_pkey" PRIMARY KEY ("Violation_ID");


--
-- Name: Car WIN; Type: CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Car"
    ADD CONSTRAINT "WIN" UNIQUE ("WIN number") INCLUDE ("WIN number");


--
-- Name: Participants status Crash ID; Type: FK CONSTRAINT; Schema: public;
Owner: postgres
--

ALTER TABLE ONLY public."Participants status"
    ADD CONSTRAINT "Crash ID" FOREIGN KEY ("Crash_ID") REFERENCES
public."Crash"("Crash ID");


--
-- Name: Rights deprivation DL number; Type: FK CONSTRAINT; Schema: public;
Owner: postgres
--

ALTER TABLE ONLY public."Rights deprivation"
    ADD CONSTRAINT "DL number" FOREIGN KEY ("DL number") REFERENCES
public."Car_owner"("DL number");


--
-- Name: Registered_car DL number; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Registered_car"
    ADD CONSTRAINT "DL number" FOREIGN KEY ("DL number") REFERENCES
public."Car_owner"("DL number");


--
-- Name: Policemen Department ID; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Policemen"
    ADD CONSTRAINT "Department ID" FOREIGN KEY ("Department_ID") REFERENCES
public."Police department"("Department_ID") NOT VALID;


--
-- Name: Registered_car Department ID; Type: FK CONSTRAINT; Schema: public;
Owner: postgres
```

```sql
--

ALTER TABLE ONLY public."Registered_car"
    ADD CONSTRAINT "Department ID" FOREIGN KEY ("Department_ID") REFERENCES
public."Police department"("Department_ID");


--
-- Name: Car Model_id; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY public."Car"
    ADD CONSTRAINT "Model_id" FOREIGN KEY ("ID model") REFERENCES
public."Car_model"("Model ID");


--
-- Name: Participants status PTS; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Participants status"
    ADD CONSTRAINT "PTS" FOREIGN KEY ("PTS number") REFERENCES
public."Registered_car"("PTS number");


--
-- Name: Violation Personal number; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Violation"
    ADD CONSTRAINT "Personal number" FOREIGN KEY ("Personal number") REFERENCES
public."Policemen"("Personal number");


--
-- Name: Violation Violation ID; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Violation"
    ADD CONSTRAINT "Violation ID" FOREIGN KEY ("Violation_id") REFERENCES
public."Violation_types"("Violation_ID");


--
-- Name: Violation Violation PTS; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Violation"
    ADD CONSTRAINT "Violation PTS" FOREIGN KEY ("PTS number") REFERENCES
public."Registered_car"("PTS number") NOT VALID;


--
-- Name: Registered_car WIN number; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Registered_car"
    ADD CONSTRAINT "WIN number" FOREIGN KEY ("WIN number") REFERENCES
```

```
public."Car"("WIN number");


--
-- Name: Crash Табельный номер; Type: FK CONSTRAINT; Schema: public; Owner:
postgres
--

ALTER TABLE ONLY public."Crash"
    ADD CONSTRAINT "Табельный номер" FOREIGN KEY ("Service_number") REFERENCES
public."Policemen"("Personal number");



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

Вывод

В ходе лабораторной работы я смог освоить навыки по созданию, заполнению и восстановлению баз данных в PostgreSQL с использованием инструмента управления pgAdmin 4. Была создана структура базы данных, включая таблицы с различными ограничениями для обеспечения целостности данных. Далее, таблицы были заполнены различными рабочими данными. Для безопасности информации были созданы резервные копии с разными расширениями, что позволило как восстановить базу данных, так и просмотреть листинг данных. Конечным этапом было успешное восстановление БД, подтверждающее корректность ранее выполненных действий.