

Министерство науки и высшего образования Российской Федерации
федеральное государственное автономное образовательное учреждение
высшего образования
«Национальный исследовательский университет ИТМО»
Факультет инфокоммуникационных технологий

Лабораторная работа №1.2
«Создание таблиц базы данных POSTGRESQL.
Заполнение таблиц рабочими данными»
по дисциплине «Проектирование и
реализация баз данных»

Выполнил:
студент II курса ИКТ
группы К3241
Конев А.В.

Проверил:
Говорова М.М.

Санкт-Петербург
2022

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

Оборудование: компьютерный класс.

Программное обеспечение: СУБД PostgreSQL 1X, pgAdmin 4.

Практическое задание:

1. Создать базу данных с использованием pgAdmin 4 (согласно индивидуальному заданию).
2. Создать схему в составе базы данных.
3. Создать таблицы базы данных.
4. Установить ограничения на данные: *Primary Key, Unique, Check, Foreign Key*.
5. Заполнить таблицы БД рабочими данными.
6. Создать резервную копию БД.

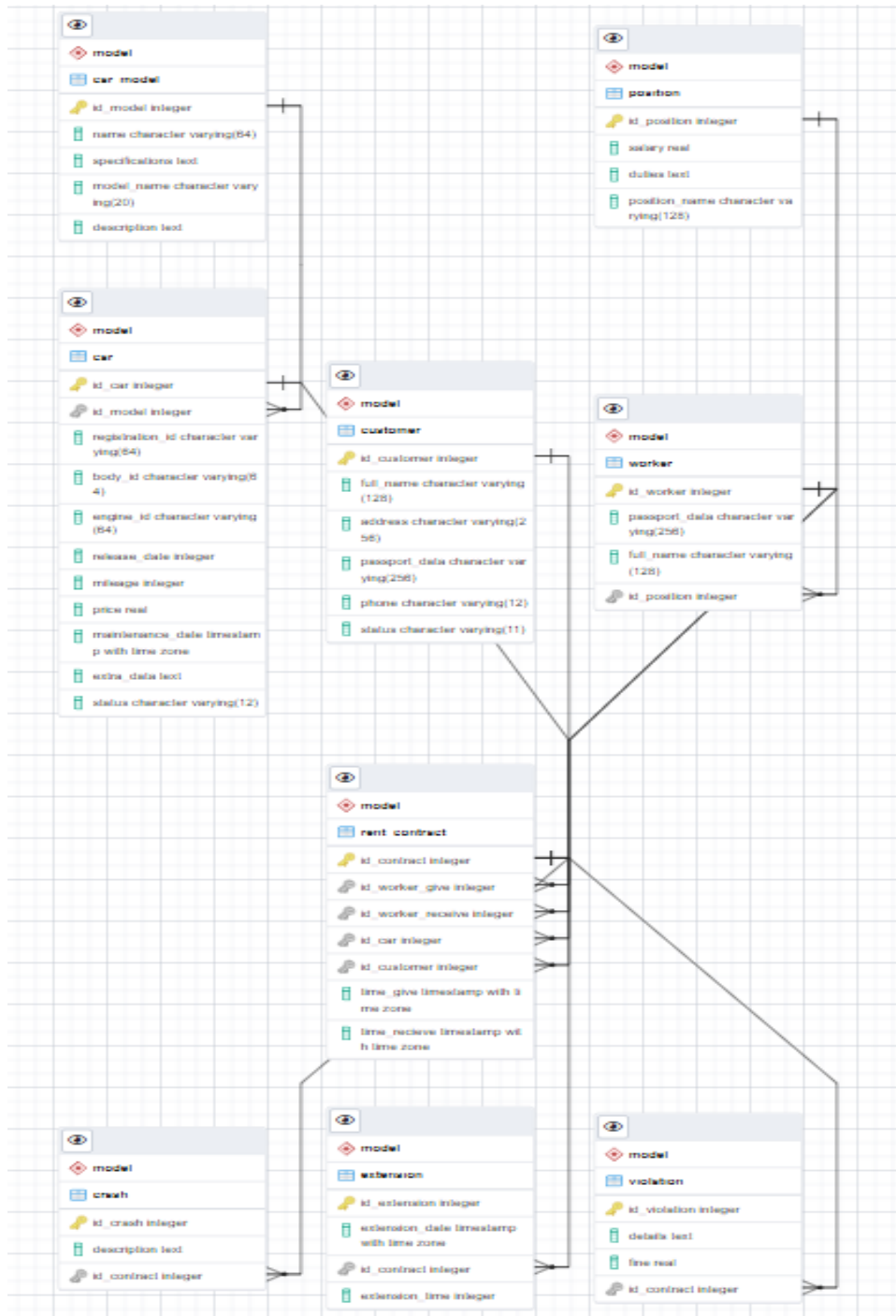
Указание:

Создать две резервные копии:

- с расширением *CUSTOM* для восстановления БД;
 - с расширением *PLAIN* для листинга (в отчете);
 - при создании резервных копий БД настроить параметры *Dump options* для *Type of objects* и *Queries* .
7. Восстановить БД.

Выполнение:

1. Наименование БД - car_rent_db
2. Схема логической модели базы данных



```

--
-- PostgreSQL database dump
--

-- Dumped from database version 14.2 (Debian 14.2-1.pgdg110+1)
-- Dumped by pg_dump version 14.1

-- Started on 2022-02-27 14:15:01 UTC


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 car_rent_db;
--
-- TOC entry 3442 (class 1262 OID 16385)
-- Name: car_rent_db; Type: DATABASE; Schema: -; Owner: lichesscool
--

CREATE DATABASE car_rent_db WITH TEMPLATE = template0 ENCODING =
'UTF8' LOCALE = 'en_US.utf8';


ALTER DATABASE car_rent_db OWNER TO lichesscool;


\connect car_rent_db


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;

```

```
--  
-- TOC entry 6 (class 2615 OID 16811)  
-- Name: model; Type: SCHEMA; Schema: -; Owner: lichesscool  
--
```

#Создание схемы "модель"

```
CREATE SCHEMA model;
```

```
ALTER SCHEMA model OWNER TO lichesscool;
```

```
SET default_tablespace = '';
```

```
SET default_table_access_method = heap;
```

```
--  
-- TOC entry 210 (class 1259 OID 16812)  
-- Name: car; Type: TABLE; Schema: model; Owner: lichesscool  
--
```

#Создание таблицы "машина"

```
CREATE TABLE model.car (  
    id_car integer NOT NULL,  
    id_model integer NOT NULL,  
    registration_id character varying(64) NOT NULL,  
    body_id character varying(64) NOT NULL,  
    engine_id character varying(64) NOT NULL,  
    release_date integer NOT NULL,  
    mileage integer NOT NULL,  
    price real NOT NULL,  
    maintenance_date timestamp with time zone NOT NULL,  
    extra_data text,  
    status character varying(12) NOT NULL  
);
```

```
ALTER TABLE model.car OWNER TO lichesscool;
```

```
--  
-- TOC entry 211 (class 1259 OID 16817)  
-- Name: car_id_car_seq; Type: SEQUENCE; Schema: model; Owner: lichesscool  
--
```

#Создание последовательности для таблицы "машина"

```
CREATE SEQUENCE model.car_id_car_seq  
    AS integer  
    START WITH 1
```

```
INCREMENT BY 1
NO MINVALUE
NO MAXVALUE
CACHE 1;
```

```
ALTER TABLE model.car_id_car_seq OWNER TO lichesscool;
```

```
--
-- TOC entry 3443 (class 0 OID 0)
-- Dependencies: 211
-- Name: car_id_car_seq; Type: SEQUENCE OWNED BY; Schema: model; Owner:
lichesscool
--
```

```
ALTER SEQUENCE model.car_id_car_seq OWNED BY model.car.id_car;
```

```
--
-- TOC entry 212 (class 1259 OID 16818)
-- Name: car_model; Type: TABLE; Schema: model; Owner: lichesscool
--
```

#Создание таблицы "модель"

```
CREATE TABLE model.car_model (
  id_model integer NOT NULL,
  name character varying(64) NOT NULL,
  specifications text NOT NULL,
  model_name character varying(20) NOT NULL,
  description text
);
```

```
ALTER TABLE model.car_model OWNER TO lichesscool;
```

```
--
-- TOC entry 213 (class 1259 OID 16823)
-- Name: car_model_id_model_seq; Type: SEQUENCE; Schema: model; Owner:
lichesscool
--
```

#Создание последовательности для таблицы "модель"

```
CREATE SEQUENCE model.car_model_id_model_seq
  AS integer
  START WITH 1
  INCREMENT BY 1
  NO MINVALUE
```

```
NO MAXVALUE
CACHE 1;
```

```
ALTER TABLE model.car_model_id_model_seq OWNER TO lichesscool;
```

```
--
-- TOC entry 3444 (class 0 OID 0)
-- Dependencies: 213
-- Name: car_model_id_model_seq; Type: SEQUENCE OWNED BY; Schema: model;
Owner: lichesscool
--
```

```
ALTER SEQUENCE model.car_model_id_model_seq OWNED BY
model.car_model.id_model;
```

```
--
-- TOC entry 214 (class 1259 OID 16824)
-- Name: crash; Type: TABLE; Schema: model; Owner: lichesscool
--
```

```
#Создание таблицы "авария"
```

```
CREATE TABLE model.crash (
    id_crash integer NOT NULL,
    description text,
    id_contract integer NOT NULL
);
```

```
ALTER TABLE model.crash OWNER TO lichesscool;
```

```
--
-- TOC entry 215 (class 1259 OID 16829)
-- Name: crash_id_crash_seq; Type: SEQUENCE; Schema: model; Owner:
lichesscool
--
```

```
#Создание последовательности для таблицы "авария"
```

```
CREATE SEQUENCE model.crash_id_crash_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;
```

```
ALTER TABLE model.crash_id_crash_seq OWNER TO lichesscool;
```

```
--  
-- TOC entry 3445 (class 0 OID 0)  
-- Dependencies: 215  
-- Name: crash_id_crash_seq; Type: SEQUENCE OWNED BY; Schema: model;  
Owner: lichesscool  
--
```

```
ALTER SEQUENCE model.crash_id_crash_seq OWNED BY model.crash.id_crash;
```

```
--  
-- TOC entry 216 (class 1259 OID 16830)  
-- Name: customer; Type: TABLE; Schema: model; Owner: lichesscool  
--
```

```
#Создание таблицы "покупатель"
```

```
CREATE TABLE model.customer (  
    id_customer integer NOT NULL,  
    full_name character varying(128) NOT NULL,  
    address character varying(256) NOT NULL,  
    passport_data character varying(256) NOT NULL,  
    phone character varying(12) NOT NULL,  
    status character varying(11) NOT NULL  
);
```

```
ALTER TABLE model.customer OWNER TO lichesscool;
```

```
--  
-- TOC entry 217 (class 1259 OID 16835)  
-- Name: customer_id_customer_seq; Type: SEQUENCE; Schema: model; Owner:  
lichesscool  
--
```

```
#Создание последовательности для таблицы "покупатель"
```

```
CREATE SEQUENCE model.customer_id_customer_seq  
    AS integer  
    START WITH 1  
    INCREMENT BY 1  
    NO MINVALUE  
    NO MAXVALUE  
    CACHE 1;
```



```
ALTER TABLE model.customer_id_customer_seq OWNER TO lichesscool;

--
-- TOC entry 3446 (class 0 OID 0)
-- Dependencies: 217
-- Name: customer_id_customer_seq; Type: SEQUENCE OWNED BY; Schema:
model; Owner: lichesscool
--
```

```
ALTER SEQUENCE model.customer_id_customer_seq OWNED BY
model.customer.id_customer;
```

```
--
-- TOC entry 218 (class 1259 OID 16836)
-- Name: extension; Type: TABLE; Schema: model; Owner: lichesscool
--
```

#Создание таблицы "продление"

```
CREATE TABLE model.extension (
    id_extension integer NOT NULL,
    extension_date timestamp with time zone NOT NULL,
    id_contract integer NOT NULL,
    extension_time integer NOT NULL
);
```

```
ALTER TABLE model.extension OWNER TO lichesscool;
```

```
--
-- TOC entry 219 (class 1259 OID 16839)
-- Name: extension_id_extension_seq; Type: SEQUENCE; Schema: model; Owner:
lichesscool
--
```

#Создание последовательности для таблицы "продление"

```
CREATE SEQUENCE model.extension_id_extension_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;
```

```
ALTER TABLE model.extension_id_extension_seq OWNER TO lichesscool;
```

```
--  
-- TOC entry 3447 (class 0 OID 0)  
-- Dependencies: 219  
-- Name: extension_id_extension_seq; Type: SEQUENCE OWNED BY; Schema:  
model; Owner: lichesscool  
--
```

```
ALTER SEQUENCE model.extension_id_extension_seq OWNED BY  
model.extension.id_extension;
```

```
--  
-- TOC entry 220 (class 1259 OID 16840)  
-- Name: position; Type: TABLE; Schema: model; Owner: lichesscool  
--
```

#Создание таблицы "должность"

```
CREATE TABLE model."position" (  
    id_position integer NOT NULL,  
    salary real NOT NULL,  
    duties text NOT NULL,  
    position_name character varying(128) NOT NULL  
);
```

```
ALTER TABLE model."position" OWNER TO lichesscool;
```

```
--  
-- TOC entry 221 (class 1259 OID 16845)  
-- Name: position_id_position_seq; Type: SEQUENCE; Schema: model; Owner:  
lichesscool  
--
```

#Создание последовательности для таблицы "должность"

```
CREATE SEQUENCE model.position_id_position_seq  
    AS integer  
    START WITH 1  
    INCREMENT BY 1  
    NO MINVALUE  
    NO MAXVALUE  
    CACHE 1;
```

```
ALTER TABLE model.position_id_position_seq OWNER TO lichesscool;
```

```
--  
-- TOC entry 3448 (class 0 OID 0)
```

```
-- Dependencies: 221
-- Name: position_id_position_seq; Type: SEQUENCE OWNED BY; Schema: model;
Owner: lichesscool
--
```

```
ALTER SEQUENCE model.position_id_position_seq OWNED BY
model."position".id_position;
```

```
--
-- TOC entry 222 (class 1259 OID 16846)
-- Name: rent_contract; Type: TABLE; Schema: model; Owner: lichesscool
--
```

#Создание таблицы "договор проката"

```
CREATE TABLE model.rent_contract (
    id_contract integer NOT NULL,
    id_worker_give integer NOT NULL,
    id_worker_receive integer NOT NULL,
    id_car integer NOT NULL,
    id_customer integer NOT NULL,
    time_give timestamp with time zone NOT NULL,
    time_recieve timestamp with time zone NOT NULL
);
```

```
ALTER TABLE model.rent_contract OWNER TO lichesscool;
```

```
--
-- TOC entry 223 (class 1259 OID 16849)
-- Name: rent_contract_id_contract_seq; Type: SEQUENCE; Schema: model;
Owner: lichesscool
--
```

#Создание последовательностей для таблицы "договор проката"

```
CREATE SEQUENCE model.rent_contract_id_contract_seq
AS integer
START WITH 1
INCREMENT BY 1
NO MINVALUE
NO MAXVALUE
CACHE 1;
```

```
ALTER TABLE model.rent_contract_id_contract_seq OWNER TO lichesscool;
```

```
--
```

```
-- TOC entry 3449 (class 0 OID 0)
-- Dependencies: 223
-- Name: rent_contract_id_contract_seq; Type: SEQUENCE OWNED BY; Schema:
model; Owner: lichesscool
--
```

```
ALTER SEQUENCE model.rent_contract_id_contract_seq OWNED BY
model.rent_contract.id_contract;
```

```
--
-- TOC entry 224 (class 1259 OID 16850)
-- Name: rent_contract_id_worker_give_seq; Type: SEQUENCE; Schema: model;
Owner: lichesscool
--
```

```
CREATE SEQUENCE model.rent_contract_id_worker_give_seq
AS integer
START WITH 1
INCREMENT BY 1
NO MINVALUE
NO MAXVALUE
CACHE 1;
```

```
ALTER TABLE model.rent_contract_id_worker_give_seq OWNER TO lichesscool;
```

```
--
-- TOC entry 3450 (class 0 OID 0)
-- Dependencies: 224
-- Name: rent_contract_id_worker_give_seq; Type: SEQUENCE OWNED BY;
Schema: model; Owner: lichesscool
--
```

```
ALTER SEQUENCE model.rent_contract_id_worker_give_seq OWNED BY
model.rent_contract.id_worker_give;
```

```
--
-- TOC entry 225 (class 1259 OID 16851)
-- Name: violation; Type: TABLE; Schema: model; Owner: lichesscool
--
```

#Создание таблицы "нарушение"

```
CREATE TABLE model.violation (
    id_violation integer NOT NULL,
```

```
    details text NOT NULL,  
    fine real NOT NULL,  
    id_contract integer NOT NULL  
);
```

```
ALTER TABLE model.violation OWNER TO lichesscool;
```

```
--  
-- TOC entry 226 (class 1259 OID 16856)  
-- Name: violation_id_violation_seq; Type: SEQUENCE; Schema: model; Owner:  
lichesscool
```

```
--  
#Создание последовательности для таблицы "нарушение"
```

```
CREATE SEQUENCE model.violation_id_violation_seq  
    AS integer  
    START WITH 1  
    INCREMENT BY 1  
    NO MINVALUE  
    NO MAXVALUE  
    CACHE 1;
```

```
ALTER TABLE model.violation_id_violation_seq OWNER TO lichesscool;
```

```
--  
-- TOC entry 3451 (class 0 OID 0)  
-- Dependencies: 226  
-- Name: violation_id_violation_seq; Type: SEQUENCE OWNED BY; Schema: model;  
Owner: lichesscool  
--
```

```
ALTER SEQUENCE model.violation_id_violation_seq OWNED BY  
model.violation.id_violation;
```

```
--  
-- TOC entry 227 (class 1259 OID 16857)  
-- Name: worker; Type: TABLE; Schema: model; Owner: lichesscool  
--
```

```
#Создание таблицы "работник"
```

```
CREATE TABLE model.worker (  
    id_worker integer NOT NULL,  
    passport_data character varying(256) NOT NULL,  
    full_name character varying(128) NOT NULL,
```

```
id_position integer NOT NULL
);
```

```
ALTER TABLE model.worker OWNER TO lichesscool;
```

```
--
-- TOC entry 228 (class 1259 OID 16860)
-- Name: worker_id_worker_seq; Type: SEQUENCE; Schema: model; Owner:
lichesscool
```

```
--
#Создание последовательности для таблицы "работник"
```

```
CREATE SEQUENCE model.worker_id_worker_seq
AS integer
START WITH 1
INCREMENT BY 1
NO MINVALUE
NO MAXVALUE
CACHE 1;
```

```
ALTER TABLE model.worker_id_worker_seq OWNER TO lichesscool;
```

```
--
-- TOC entry 3452 (class 0 OID 0)
-- Dependencies: 228
-- Name: worker_id_worker_seq; Type: SEQUENCE OWNED BY; Schema: model;
Owner: lichesscool
```

```
--
ALTER SEQUENCE model.worker_id_worker_seq OWNED BY
model.worker.id_worker;
```

```
--
-- TOC entry 3209 (class 2604 OID 16861)
-- Name: car id_car; Type: DEFAULT; Schema: model; Owner: lichesscool
--
```

```
ALTER TABLE ONLY model.car ALTER COLUMN id_car SET DEFAULT
nextval('model.car_id_car_seq'::regclass);
```

```
--
-- TOC entry 3219 (class 2604 OID 16862)
```

```
-- Name: car_model id_model; Type: DEFAULT; Schema: model; Owner: lichesscool
--
```

```
ALTER TABLE ONLY model.car_model ALTER COLUMN id_model SET DEFAULT
nextval('model.car_model_id_model_seq'::regclass);
```

```
--
-- TOC entry 3220 (class 2604 OID 16863)
-- Name: crash id_crash; Type: DEFAULT; Schema: model; Owner: lichesscool
--
```

```
ALTER TABLE ONLY model.crash ALTER COLUMN id_crash SET DEFAULT
nextval('model.crash_id_crash_seq'::regclass);
```

```
--
-- TOC entry 3221 (class 2604 OID 16864)
-- Name: customer id_customer; Type: DEFAULT; Schema: model; Owner:
lichesscool
--
```

```
ALTER TABLE ONLY model.customer ALTER COLUMN id_customer SET DEFAULT
nextval('model.customer_id_customer_seq'::regclass);
```

```
--
-- TOC entry 3223 (class 2604 OID 16865)
-- Name: extension id_extension; Type: DEFAULT; Schema: model; Owner:
lichesscool
--
```

```
ALTER TABLE ONLY model.extension ALTER COLUMN id_extension SET DEFAULT
nextval('model.extension_id_extension_seq'::regclass);
```

```
--
-- TOC entry 3228 (class 2604 OID 16866)
-- Name: position id_position; Type: DEFAULT; Schema: model; Owner: lichesscool
--
```

```
ALTER TABLE ONLY model."position" ALTER COLUMN id_position SET DEFAULT
nextval('model.position_id_position_seq'::regclass);
```

```

--
-- TOC entry 3230 (class 2604 OID 16867)
-- Name: rent_contract id_contract; Type: DEFAULT; Schema: model; Owner:
lichesscool
--

ALTER TABLE ONLY model.rent_contract ALTER COLUMN id_contract SET
DEFAULT nextval('model.rent_contract_id_contract_seq'::regclass);

--
-- TOC entry 3231 (class 2604 OID 16868)
-- Name: rent_contract id_worker_give; Type: DEFAULT; Schema: model; Owner:
lichesscool
--

ALTER TABLE ONLY model.rent_contract ALTER COLUMN id_worker_give SET
DEFAULT nextval('model.rent_contract_id_worker_give_seq'::regclass);

--
-- TOC entry 3236 (class 2604 OID 16869)
-- Name: violation id_violation; Type: DEFAULT; Schema: model; Owner: lichesscool
--

ALTER TABLE ONLY model.violation ALTER COLUMN id_violation SET DEFAULT
nextval('model.violation_id_violation_seq'::regclass);

--
-- TOC entry 3238 (class 2604 OID 16870)
-- Name: worker id_worker; Type: DEFAULT; Schema: model; Owner: lichesscool
--

ALTER TABLE ONLY model.worker ALTER COLUMN id_worker SET DEFAULT
nextval('model.worker_id_worker_seq'::regclass);

--
-- TOC entry 3418 (class 0 OID 16812)
-- Dependencies: 210
-- Data for Name: car; Type: TABLE DATA; Schema: model; Owner: lichesscool
--
#Добавление данных в таблицу "машина"

```



```
INSERT INTO model.car (id_car, id_model, registration_id, body_id, engine_id,
release_date, mileage, price, maintenance_date, extra_data, status) VALUES (1, 2,
'13', '324', '131', 2002, 313, 56.9, '2017-04-25 15:59:22.691+00', '2017-04-26 15:59:22.691000
+00:00', 'rented');
```

```
INSERT INTO model.car (id_car, id_model, registration_id, body_id, engine_id,
release_date, mileage, price, maintenance_date, extra_data, status) VALUES (2, 3,
'24242', '13123', '5253', 1930, 6423, 67.1, '2015-04-23 16:09:56.819+00', '2015-04-24
16:09:56.819000 +00:00', 'vacant');
```

```
INSERT INTO model.car (id_car, id_model, registration_id, body_id, engine_id,
release_date, mileage, price, maintenance_date, extra_data, status) VALUES (5, 5,
'13131', '353', '7575', 1976, 67435, 34.1, '2015-04-23 16:09:56.819+00', '2018-04-24
16:09:56.819000 +00:00', 'vacant');
```

```
INSERT INTO model.car (id_car, id_model, registration_id, body_id, engine_id,
release_date, mileage, price, maintenance_date, extra_data, status) VALUES (3, 4,
'47465', '65242', '4352', 1943, 6552, 5667.9, '2005-04-25 15:59:22.691+00', '2005-04-28
15:59:22.691000 +00:00', 'booked');
```

```
INSERT INTO model.car (id_car, id_model, registration_id, body_id, engine_id,
release_date, mileage, price, maintenance_date, extra_data, status) VALUES (4, 1,
'463', '6768', '968', 2008, 7546, 464.9, '2016-04-25 15:59:22.691+00', '2016-04-26
15:59:22.691000 +00:00', 'booked');
```

--

-- TOC entry 3420 (class 0 OID 16818)

-- Dependencies: 212

-- Data for Name: car_model; Type: TABLE DATA; Schema: model; Owner: lichesscool

--

#Добавление данных в таблицу "модель"

```
INSERT INTO model.car_model (id_model, name, specifications, model_name,
description) VALUES (2, 'honda', 'some text
', 'honda civic
', 'some text');
```

```
INSERT INTO model.car_model (id_model, name, specifications, model_name,
description) VALUES (3, 'chevrolet', 'some text
', 'chevrolet camaro', 'some text');
```

```
INSERT INTO model.car_model (id_model, name, specifications, model_name,
description) VALUES (4, 'honda', 'bad tires
', 'honda accord
', 'trash');
```

```
INSERT INTO model.car_model (id_model, name, specifications, model_name,
description) VALUES (5, 'toyota', 'some japanese text
', 'toyota hilix
', 'some text');
```

```
INSERT INTO model.car_model (id_model, name, specifications, model_name,
description) VALUES (1, 'dodge', 'some text
', 'dodge ram
', 'some text');
```

--

-- TOC entry 3422 (class 0 OID 16824)

-- Dependencies: 214

-- Data for Name: crash; Type: TABLE DATA; Schema: model; Owner: lichesscool

--

#Добавление данных в таблицу "авария"

```
INSERT INTO model.crash (id_crash, description, id_contract) VALUES (624, 'car
crash', 3);
```

```
INSERT INTO model.crash (id_crash, description, id_contract) VALUES (464, 'crahed
into granny', 4);
```

--

-- TOC entry 3424 (class 0 OID 16830)

-- Dependencies: 216

-- Data for Name: customer; Type: TABLE DATA; Schema: model; Owner: lichesscool

--

#Добавление данных в таблицу "покупатель"

```
INSERT INTO model.customer (id_customer, full_name, address, passport_data,
phone, status) VALUES (999, 'Рощина Валентина Григorieвна', 'Россия, г.
Арзамас, Луговая ул., д. 17 кв.114', '4155 277457 340-401 ОВД России по г. Тюмень
27.04.2015 Россия, г. Тюмень, ЯнкиКупалы ул., д. 14 кв.170', '+75687746615',
'unavailable');
```

```
INSERT INTO model.customer (id_customer, full_name, address, passport_data,
phone, status) VALUES (998, 'Кияк Георгий Савванович', 'Россия, г. Тюмень,
ЯнкиКупалы ул., д. 14 кв.170', '4936 884413 180-531 Отделением УФМС России по
г. Камышин 03.12.2015', '+77941811785', 'available');
```

```
INSERT INTO model.customer (id_customer, full_name, address, passport_data,
phone, status) VALUES (997, 'Кабицина Катерина Григорьевна', 'Россия, г.
Камышин, Речной пер., д. 2 кв.134', '4629 772906 360-897 Россия, г. Ессентуки,
Коммунистическая ул., д. 14 кв.169 09.02.2022', '+70644719498', 'unavailable');
```

```
INSERT INTO model.customer (id_customer, full_name, address, passport_data,
phone, status) VALUES (996, 'Якимов Максим Ростиславович', 'Россия, г.
Ессентуки, Коммунистическая ул., д. 14 кв.169', '4863 828438 160-478
Отделением УФМС России по г. Ессентуки 20.10.2019', '+75270637601', 'available');
```

```
INSERT INTO model.customer (id_customer, full_name, address, passport_data,
phone, status) VALUES (995, 'Шелыгин Давид Давидович', 'Россия, г. Северск,
```

Спортивная ул., д. 16 кв.182, '4429 404530 710-553 ОВД России по г. Северск
11.09.2016', '+74953415243', 'unavailable');

--

-- TOC entry 3426 (class 0 OID 16836)

-- Dependencies: 218

-- Data for Name: extension; Type: TABLE DATA; Schema: model; Owner:
lichesscool

--

#Добавление данных в таблицу "продление"

INSERT INTO model.extension (id_extension, extension_date, id_contract,
extension_time) VALUES (3142, '2021-02-10 16:55:23.888+00', 4, 12);

INSERT INTO model.extension (id_extension, extension_date, id_contract,
extension_time) VALUES (4352, '2021-05-26 16:55:46.287+00', 5, 5);

--

-- TOC entry 3428 (class 0 OID 16840)

-- Dependencies: 220

-- Data for Name: position; Type: TABLE DATA; Schema: model; Owner: lichesscool

--

#Добавление данных в таблицу "должность"

INSERT INTO model."position" (id_position, salary, duties, position_name) VALUES
(123, 75355, 'give staff', 'giver');

INSERT INTO model."position" (id_position, salary, duties, position_name) VALUES
(234, 4522.6, 'recieve staff', 'reciever');

INSERT INTO model."position" (id_position, salary, duties, position_name) VALUES
(345, 8424.5, 'fewer duty', 'son of a gun');

INSERT INTO model."position" (id_position, salary, duties, position_name) VALUES
(456, 753.8, 'prikol', 'prikopazza');

--

-- TOC entry 3430 (class 0 OID 16846)

-- Dependencies: 222

-- Data for Name: rent_contract; Type: TABLE DATA; Schema: model; Owner:
lichesscool

--

#Добавление данных в таблицу "договор проката"

INSERT INTO model.rent_contract (id_contract, id_worker_give, id_worker_receive,
id_car, id_customer, time_give, time_recieve) VALUES (1, 100, 100, 1, 995, '2021-04-23
16:43:51.984+00', '2021-04-25 16:44:01.94+00');

```

INSERT INTO model.rent_contract (id_contract, id_worker_give, id_worker_receive,
id_car, id_customer, time_give, time_recieve) VALUES (2, 101, 102, 2, 996,
'2021-06-03 20:44:36.363+00', '2021-06-03 22:44:51.986+00');
INSERT INTO model.rent_contract (id_contract, id_worker_give, id_worker_receive,
id_car, id_customer, time_give, time_recieve) VALUES (3, 102, 103, 3, 997,
'2021-09-09 16:45:12.566+00', '2021-09-11 16:45:21.879+00');
INSERT INTO model.rent_contract (id_contract, id_worker_give, id_worker_receive,
id_car, id_customer, time_give, time_recieve) VALUES (4, 103, 100, 4, 998,
'2021-02-10 16:46:44.507+00', '2021-02-12 16:46:55.312+00');
INSERT INTO model.rent_contract (id_contract, id_worker_give, id_worker_receive,
id_car, id_customer, time_give, time_recieve) VALUES (5, 100, 101, 5, 999, '2021-05-25
16:47:01.647+00', '2021-05-27 16:47:07.418+00');

```

```

--
-- TOC entry 3433 (class 0 OID 16851)
-- Dependencies: 225
-- Data for Name: violation; Type: TABLE DATA; Schema: model; Owner: lichesscool
--

```

#Добавление данных в таблицу “нарушение”

```

INSERT INTO model.violation (id_violation, details, fine, id_contract) VALUES (5352,
'engine water punch', 313.5, 2);
INSERT INTO model.violation (id_violation, details, fine, id_contract) VALUES (3131,
'car crossed line ', 1312.3, 1);

```

```

--
-- TOC entry 3435 (class 0 OID 16857)
-- Dependencies: 227
-- Data for Name: worker; Type: TABLE DATA; Schema: model; Owner: lichesscool
--

```

#Добавление данных в таблицу “работник”

```

INSERT INTO model.worker (id_worker, passport_data, full_name, id_position)
VALUES (100, '4522 499855 870-600 ОУФМС России по г. Москва 22.06.2018
Россия, г. Москва, Мирная ул., д. 13 кв.65', 'Константинов Касьян Владленович',
123);
INSERT INTO model.worker (id_worker, passport_data, full_name, id_position)
VALUES (101, '4723 734357 740-841 Отделом УФМС России по г. Уфа 05.05.2017
Россия, г. Уфа, Космонавтов ул., д. 8 кв.120', 'Бобылёв Петр Русланович', 234);
INSERT INTO model.worker (id_worker, passport_data, full_name, id_position)
VALUES (102, '4675 517566 690-379 Отделом УФМС России по г. Дербент
19.12.2014 Россия, г. Дербент, Октябрьская ул., д. 10 кв.104', 'Доронин Герман
Геннадьевич', 345);
INSERT INTO model.worker (id_worker, passport_data, full_name, id_position)
VALUES (103, '4828 427226 950-913 Отделением УФМС России по г. Арзамас

```

13.08.2018 Россия, г. Арзамас, Луговая ул., д. 17 кв.114, 'Фёдоров Исаак
Артемович', 456);

```
--  
-- TOC entry 3453 (class 0 OID 0)  
-- Dependencies: 211  
-- Name: car_id_car_seq; Type: SEQUENCE SET; Schema: model; Owner:  
lichesscool  
--
```

```
SELECT pg_catalog.setval('model.car_id_car_seq', 1, false);
```

```
--  
-- TOC entry 3454 (class 0 OID 0)  
-- Dependencies: 213  
-- Name: car_model_id_model_seq; Type: SEQUENCE SET; Schema: model; Owner:  
lichesscool  
--
```

```
SELECT pg_catalog.setval('model.car_model_id_model_seq', 1, false);
```

```
--  
-- TOC entry 3455 (class 0 OID 0)  
-- Dependencies: 215  
-- Name: crash_id_crash_seq; Type: SEQUENCE SET; Schema: model; Owner:  
lichesscool  
--
```

```
SELECT pg_catalog.setval('model.crash_id_crash_seq', 1, false);
```

```
--  
-- TOC entry 3456 (class 0 OID 0)  
-- Dependencies: 217  
-- Name: customer_id_customer_seq; Type: SEQUENCE SET; Schema: model;  
Owner: lichesscool  
--
```

```
SELECT pg_catalog.setval('model.customer_id_customer_seq', 1, false);
```

```
--
```

```
-- TOC entry 3457 (class 0 OID 0)
-- Dependencies: 219
-- Name: extension_id_extension_seq; Type: SEQUENCE SET; Schema: model;
Owner: lichesscool
--
```

```
SELECT pg_catalog.setval('model.extension_id_extension_seq', 1, false);
```

```
--
-- TOC entry 3458 (class 0 OID 0)
-- Dependencies: 221
-- Name: position_id_position_seq; Type: SEQUENCE SET; Schema: model; Owner:
lichesscool
--
```

```
SELECT pg_catalog.setval('model.position_id_position_seq', 1, false);
```

```
--
-- TOC entry 3459 (class 0 OID 0)
-- Dependencies: 223
-- Name: rent_contract_id_contract_seq; Type: SEQUENCE SET; Schema: model;
Owner: lichesscool
--
```

```
SELECT pg_catalog.setval('model.rent_contract_id_contract_seq', 1, false);
```

```
--
-- TOC entry 3460 (class 0 OID 0)
-- Dependencies: 224
-- Name: rent_contract_id_worker_give_seq; Type: SEQUENCE SET; Schema:
model; Owner: lichesscool
--
```

```
SELECT pg_catalog.setval('model.rent_contract_id_worker_give_seq', 1, false);
```

```
--
-- TOC entry 3461 (class 0 OID 0)
-- Dependencies: 226
-- Name: violation_id_violation_seq; Type: SEQUENCE SET; Schema: model; Owner:
lichesscool
--
```

```
SELECT pg_catalog.setval('model.violation_id_violation_seq', 1, false);
```

```
--  
-- TOC entry 3462 (class 0 OID 0)  
-- Dependencies: 228  
-- Name: worker_id_worker_seq; Type: SEQUENCE SET; Schema: model; Owner:  
lichesscool  
--
```

```
SELECT pg_catalog.setval('model.worker_id_worker_seq', 1, false);
```

```
#Создание модификаторов атрибутов и добавление ограничений на них
```

```
--  
-- TOC entry 3210 (class 2606 OID 16871)  
-- Name: car car_maintenance_date_l; Type: CHECK CONSTRAINT; Schema: model;  
Owner: lichesscool  
--
```

```
ALTER TABLE model.car  
ADD CONSTRAINT car_maintenance_date_l CHECK ((maintenance_date >=  
'1950-01-01 00:00:01+00'::timestamp with time zone)) NOT VALID;
```

```
--  
-- TOC entry 3211 (class 2606 OID 16872)  
-- Name: car car_maintenance_date_r; Type: CHECK CONSTRAINT; Schema:  
model; Owner: lichesscool  
--
```

```
ALTER TABLE model.car  
ADD CONSTRAINT car_maintenance_date_r CHECK ((maintenance_date <=  
'2100-01-01 12:59:59+00'::timestamp with time zone)) NOT VALID;
```

```
--  
-- TOC entry 3212 (class 2606 OID 16873)  
-- Name: car car_mileage_check_l; Type: CHECK CONSTRAINT; Schema: model;  
Owner: lichesscool  
--
```

```
ALTER TABLE model.car  
ADD CONSTRAINT car_mileage_check_l CHECK ((mileage >= 0)) NOT VALID;
```

```
--  
-- TOC entry 3213 (class 2606 OID 16874)  
-- Name: car car_mileage_check_r; Type: CHECK CONSTRAINT; Schema: model;  
Owner: lichesscool  
--
```

```
ALTER TABLE model.car  
  ADD CONSTRAINT car_mileage_check_r CHECK ((mileage <= 1000000)) NOT  
VALID;
```

```
--  
-- TOC entry 3246 (class 2606 OID 16876)  
-- Name: car_model car_model_pk; Type: CONSTRAINT; Schema: model; Owner:  
lichesscool  
--
```

```
ALTER TABLE ONLY model.car_model  
  ADD CONSTRAINT car_model_pk PRIMARY KEY (id_model);
```

```
--  
-- TOC entry 3243 (class 2606 OID 16878)  
-- Name: car car_pk; Type: CONSTRAINT; Schema: model; Owner: lichesscool  
--
```

```
ALTER TABLE ONLY model.car  
  ADD CONSTRAINT car_pk PRIMARY KEY (id_car);
```

```
--  
-- TOC entry 3214 (class 2606 OID 16879)  
-- Name: car car_price_l; Type: CHECK CONSTRAINT; Schema: model; Owner:  
lichesscool  
--
```

```
ALTER TABLE model.car  
  ADD CONSTRAINT car_price_l CHECK ((price > (0.0)::real)) NOT VALID;
```

```
--  
-- TOC entry 3215 (class 2606 OID 16880)  
-- Name: car car_price_r; Type: CHECK CONSTRAINT; Schema: model; Owner:  
lichesscool
```


--

```
ALTER TABLE model.car
  ADD CONSTRAINT car_price_r CHECK ((price < (100000000.0)::real)) NOT VALID;
```

--

```
-- TOC entry 3216 (class 2606 OID 16881)
-- Name: car car_year_l; Type: CHECK CONSTRAINT; Schema: model; Owner:
lichesscool
```

--

```
ALTER TABLE model.car
  ADD CONSTRAINT car_year_l CHECK ((release_date >= 1900)) NOT VALID;
```

--

```
-- TOC entry 3217 (class 2606 OID 16882)
-- Name: car car_year_r; Type: CHECK CONSTRAINT; Schema: model; Owner:
lichesscool
```

--

```
ALTER TABLE model.car
  ADD CONSTRAINT car_year_r CHECK ((release_date <= 2100)) NOT VALID;
```

--

```
-- TOC entry 3249 (class 2606 OID 16884)
-- Name: crash crash_pk; Type: CONSTRAINT; Schema: model; Owner: lichesscool
```

--

```
ALTER TABLE ONLY model.crash
  ADD CONSTRAINT crash_pk PRIMARY KEY (id_crash);
```

--

```
-- TOC entry 3253 (class 2606 OID 16886)
-- Name: customer customer_pk; Type: CONSTRAINT; Schema: model; Owner:
lichesscool
```

--

```
ALTER TABLE ONLY model.customer
  ADD CONSTRAINT customer_pk PRIMARY KEY (id_customer);
```

```

--
-- TOC entry 3224 (class 2606 OID 16887)
-- Name: extension date_check_l; Type: CHECK CONSTRAINT; Schema: model;
Owner: lichesscool
--

ALTER TABLE model.extension
  ADD CONSTRAINT date_check_l CHECK ((extension_date >= '2021-01-01
00:00:01+00':::timestamp with time zone)) NOT VALID;

--
-- TOC entry 3225 (class 2606 OID 16888)
-- Name: extension date_check_r; Type: CHECK CONSTRAINT; Schema: model;
Owner: lichesscool
--

ALTER TABLE model.extension
  ADD CONSTRAINT date_check_r CHECK ((extension_date <= '2030-01-01
00:00:00+00':::timestamp with time zone)) NOT VALID;

--
-- TOC entry 3256 (class 2606 OID 16890)
-- Name: extension extension_pk; Type: CONSTRAINT; Schema: model; Owner:
lichesscool
--

ALTER TABLE ONLY model.extension
  ADD CONSTRAINT extension_pk PRIMARY KEY (id_extension);

--
-- TOC entry 3237 (class 2606 OID 16891)
-- Name: violation fine_check; Type: CHECK CONSTRAINT; Schema: model; Owner:
lichesscool
--

ALTER TABLE model.violation
  ADD CONSTRAINT fine_check CHECK ((fine > (0.0)::real)) NOT VALID;

--
-- TOC entry 3258 (class 2606 OID 16893)

```

-- Name: position position_pk; Type: CONSTRAINT; Schema: model; Owner:
lichesscool

--

ALTER TABLE ONLY model."position"
ADD CONSTRAINT position_pk PRIMARY KEY (id_position);

--

-- TOC entry 3262 (class 2606 OID 16895)
-- Name: rent_contract rent_contract_pk; Type: CONSTRAINT; Schema: model;
Owner: lichesscool

--

ALTER TABLE ONLY model.rent_contract
ADD CONSTRAINT rent_contract_pk PRIMARY KEY (id_contract);

--

-- TOC entry 3229 (class 2606 OID 16896)
-- Name: position salary_check; Type: CHECK CONSTRAINT; Schema: model;
Owner: lichesscool

--

ALTER TABLE model."position"
ADD CONSTRAINT salary_check CHECK ((salary > (0.0)::double precision)) NOT
VALID;

--

-- TOC entry 3218 (class 2606 OID 16898)
-- Name: car status_check; Type: CHECK CONSTRAINT; Schema: model; Owner:
lichesscool

--

ALTER TABLE model.car
ADD CONSTRAINT status_check CHECK (((status)::text = ANY
(ARRAY['rented'::text, 'booked'::text, 'vacant'::text]))) NOT VALID;

--

-- TOC entry 3222 (class 2606 OID 16970)
-- Name: customer status_check; Type: CHECK CONSTRAINT; Schema: model;
Owner: lichesscool

--

```
ALTER TABLE model.customer
  ADD CONSTRAINT status_check CHECK (((status)::text = ANY
  (ARRAY[('available'::character varying)::text, ('unavailable'::character varying)::text])))
  NOT VALID;
```

```
--
-- TOC entry 3226 (class 2606 OID 16899)
-- Name: extension time_check; Type: CHECK CONSTRAINT; Schema: model;
-- Owner: lichesscool
```

```
ALTER TABLE model.extension
  ADD CONSTRAINT time_check CHECK ((extension_time > 0)) NOT VALID;
```

```
--
-- TOC entry 3227 (class 2606 OID 16900)
-- Name: extension time_check_r; Type: CHECK CONSTRAINT; Schema: model;
-- Owner: lichesscool
```

```
ALTER TABLE model.extension
  ADD CONSTRAINT time_check_r CHECK ((extension_time <= 24)) NOT VALID;
```

```
--
-- TOC entry 3232 (class 2606 OID 16901)
-- Name: rent_contract time_give_check_l; Type: CHECK CONSTRAINT; Schema:
-- model; Owner: lichesscool
```

```
ALTER TABLE model.rent_contract
  ADD CONSTRAINT time_give_check_l CHECK ((time_give >= '2021-01-01
  00:00:00+00'::timestamp with time zone)) NOT VALID;
```

```
--
-- TOC entry 3233 (class 2606 OID 16902)
-- Name: rent_contract time_give_check_r; Type: CHECK CONSTRAINT; Schema:
-- model; Owner: lichesscool
```

```
ALTER TABLE model.rent_contract
```

```
ADD CONSTRAINT time_give_check_r CHECK ((time_give <= '3000-12-31
23:59:59+00':timestamp with time zone)) NOT VALID;
```

```
--
-- TOC entry 3234 (class 2606 OID 16903)
-- Name: rent_contract time_recieve_check; Type: CHECK CONSTRAINT; Schema:
model; Owner: lichesscool
--
```

```
ALTER TABLE model.rent_contract
ADD CONSTRAINT time_recieve_check CHECK ((time_recieve > time_give)) NOT
VALID;
```

```
--
-- TOC entry 3235 (class 2606 OID 16904)
-- Name: rent_contract time_recieve_check_r; Type: CHECK CONSTRAINT; Schema:
model; Owner: lichesscool
--
```

```
ALTER TABLE model.rent_contract
ADD CONSTRAINT time_recieve_check_r CHECK ((time_recieve < '3000-12-31
23:59:59+00':timestamp with time zone)) NOT VALID;
```

```
--
-- TOC entry 3265 (class 2606 OID 16906)
-- Name: violation violation_pk; Type: CONSTRAINT; Schema: model; Owner:
lichesscool
--
```

```
ALTER TABLE ONLY model.violation
ADD CONSTRAINT violation_pk PRIMARY KEY (id_violation);
```

```
--
-- TOC entry 3269 (class 2606 OID 16908)
-- Name: worker worker_pk; Type: CONSTRAINT; Schema: model; Owner:
lichesscool
--
```

```
ALTER TABLE ONLY model.worker
ADD CONSTRAINT worker_pk PRIMARY KEY (id_worker);
```

```
--  
-- TOC entry 3239 (class 1259 OID 16909)  
-- Name: car_body_id_uindex; Type: INDEX; Schema: model; Owner: lichesscool  
--
```

```
CREATE UNIQUE INDEX car_body_id_uindex ON model.car USING btree (body_id);
```

```
--  
-- TOC entry 3240 (class 1259 OID 16910)  
-- Name: car_engine_id_uindex; Type: INDEX; Schema: model; Owner: lichesscool  
--
```

```
CREATE UNIQUE INDEX car_engine_id_uindex ON model.car USING btree  
(engine_id);
```

```
--  
-- TOC entry 3241 (class 1259 OID 16911)  
-- Name: car_id_model_uindex; Type: INDEX; Schema: model; Owner: lichesscool  
--
```

```
CREATE UNIQUE INDEX car_id_model_uindex ON model.car USING btree  
(id_model);
```

```
--  
-- TOC entry 3244 (class 1259 OID 16912)  
-- Name: car_registration_id_uindex; Type: INDEX; Schema: model; Owner:  
lichesscool  
--
```

```
CREATE UNIQUE INDEX car_registration_id_uindex ON model.car USING btree  
(registration_id);
```

```
--  
-- TOC entry 3247 (class 1259 OID 16913)  
-- Name: crash_id_contract_uindex; Type: INDEX; Schema: model; Owner:  
lichesscool  
--
```

```
CREATE UNIQUE INDEX crash_id_contract_uindex ON model.crash USING btree  
(id_contract);
```

```

--
-- TOC entry 3250 (class 1259 OID 16914)
-- Name: customer_full_name_uindex; Type: INDEX; Schema: model; Owner:
lichesscool
--

CREATE UNIQUE INDEX customer_full_name_uindex ON model.customer USING
btree (full_name);

--
-- TOC entry 3251 (class 1259 OID 16915)
-- Name: customer_passport_name_uindex; Type: INDEX; Schema: model; Owner:
lichesscool
--

CREATE UNIQUE INDEX customer_passport_name_uindex ON model.customer
USING btree (passport_data);

--
-- TOC entry 3254 (class 1259 OID 16916)
-- Name: extension_id_contract_uindex; Type: INDEX; Schema: model; Owner:
lichesscool
--

CREATE UNIQUE INDEX extension_id_contract_uindex ON model.extension
USING btree (id_contract);

--
-- TOC entry 3259 (class 1259 OID 16917)
-- Name: rent_contract_id_car_uindex; Type: INDEX; Schema: model; Owner:
lichesscool
--

CREATE UNIQUE INDEX rent_contract_id_car_uindex ON model.rent_contract
USING btree (id_car);

--
-- TOC entry 3260 (class 1259 OID 16918)

```

-- Name: rent_contract_id_customer_uindex; Type: INDEX; Schema: model; Owner: lichesscool

--

CREATE UNIQUE INDEX rent_contract_id_customer_uindex ON
model.rent_contract USING btree (id_customer);

--

-- TOC entry 3263 (class 1259 OID 16921)

-- Name: violation_id_contract_uindex; Type: INDEX; Schema: model; Owner: lichesscool

--

CREATE UNIQUE INDEX violation_id_contract_uindex ON model.violation USING
btree (id_contract);

--

-- TOC entry 3266 (class 1259 OID 16922)

-- Name: worker_id_position_uindex; Type: INDEX; Schema: model; Owner: lichesscool

--

CREATE UNIQUE INDEX worker_id_position_uindex ON model.worker USING
btree (id_position);

--

-- TOC entry 3267 (class 1259 OID 16923)

-- Name: worker_passport_data_uindex; Type: INDEX; Schema: model; Owner: lichesscool

--

CREATE UNIQUE INDEX worker_passport_data_uindex ON model.worker USING
btree (passport_data);

--

-- TOC entry 3270 (class 2606 OID 16924)

-- Name: car_car_model_id_model_fk; Type: FK CONSTRAINT; Schema: model; Owner: lichesscool

--

ALTER TABLE ONLY model.car


```
ADD CONSTRAINT car_car_model_id_model_fk FOREIGN KEY (id_model)
REFERENCES model.car_model(id_model);
```

```
--
-- TOC entry 3271 (class 2606 OID 16929)
-- Name: crash crash_rent_contract_id_contract_fk; Type: FK CONSTRAINT;
Schema: model; Owner: lichesscool
--
```

```
ALTER TABLE ONLY model.crash
ADD CONSTRAINT crash_rent_contract_id_contract_fk FOREIGN KEY
(id_contract) REFERENCES model.rent_contract(id_contract);
```

```
--
-- TOC entry 3272 (class 2606 OID 16934)
-- Name: extension extension_rent_contract_id_contract_fk; Type: FK
CONSTRAINT; Schema: model; Owner: lichesscool
--
```

```
ALTER TABLE ONLY model.extension
ADD CONSTRAINT extension_rent_contract_id_contract_fk FOREIGN KEY
(id_contract) REFERENCES model.rent_contract(id_contract);
```

```
--
-- TOC entry 3275 (class 2606 OID 16939)
-- Name: rent_contract rent_contract_car_id_car_fk; Type: FK CONSTRAINT;
Schema: model; Owner: lichesscool
--
```

```
ALTER TABLE ONLY model.rent_contract
ADD CONSTRAINT rent_contract_car_id_car_fk FOREIGN KEY (id_car)
REFERENCES model.car(id_car);
```

```
--
-- TOC entry 3276 (class 2606 OID 16944)
-- Name: rent_contract rent_contract_customer_id_customer_fk; Type: FK
CONSTRAINT; Schema: model; Owner: lichesscool
--
```

```
ALTER TABLE ONLY model.rent_contract
```

```
ADD CONSTRAINT rent_contract_customer_id_customer_fk FOREIGN KEY
(id_customer) REFERENCES model.customer(id_customer);
```

```
--
-- TOC entry 3273 (class 2606 OID 16949)
-- Name: rent_contract rent_contract_worker_id_worker_fk; Type: FK CONSTRAINT;
Schema: model; Owner: lichesscool
--
```

```
ALTER TABLE ONLY model.rent_contract
ADD CONSTRAINT rent_contract_worker_id_worker_fk FOREIGN KEY
(id_worker_give) REFERENCES model.worker(id_worker);
```

```
--
-- TOC entry 3274 (class 2606 OID 16954)
-- Name: rent_contract rent_contract_worker_id_worker_fk_2; Type: FK
CONSTRAINT; Schema: model; Owner: lichesscool
--
```

```
ALTER TABLE ONLY model.rent_contract
ADD CONSTRAINT rent_contract_worker_id_worker_fk_2 FOREIGN KEY
(id_worker_receive) REFERENCES model.worker(id_worker);
```

```
--
-- TOC entry 3277 (class 2606 OID 16959)
-- Name: violation violation_rent_contract_id_contract_fk; Type: FK CONSTRAINT;
Schema: model; Owner: lichesscool
--
```

```
ALTER TABLE ONLY model.violation
ADD CONSTRAINT violation_rent_contract_id_contract_fk FOREIGN KEY
(id_contract) REFERENCES model.rent_contract(id_contract);
```

```
--
-- TOC entry 3278 (class 2606 OID 16964)
-- Name: worker worker_position_id_position_fk; Type: FK CONSTRAINT; Schema:
model; Owner: lichesscool
--
```

```
ALTER TABLE ONLY model.worker
```

```
ADD CONSTRAINT worker_position_id_position_fk FOREIGN KEY (id_position)
REFERENCES model."position"(id_position);
```

```
-- Completed on 2022-02-27 14:15:02 UTC
```

```
--
```

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

```
--
```

Вывод: с помощью pgadmin была создана база данных. Также база была заполнена валидными данными, установлены ограничения на атрибуты таблиц. Построена логическая схема базы данных. Были выполнены резервные копирования и восстановление.