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

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

Оборудование: компьютерный класс.

Программное обеспечение: СУБД PostgreSQL 1X, pgAdmin 4.

Практическое задание:

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

− *с расширением CUSTOM для восстановления БД;*

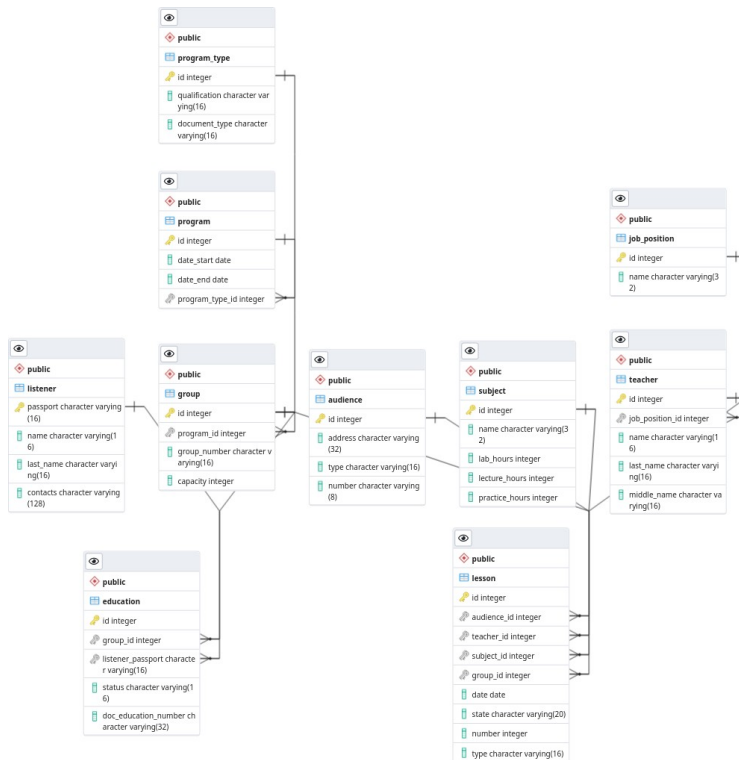− *с расширением PLAIN для листинга (в отчете);*

− *при создании резервных копий БД настроить параметры Dump options для Type of objects и Queries .*

7. Восстановить БД.

Выполнение:

1. Наименование БД - courses_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 2022-03-03 15:54:45 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;


--
-- TOC entry 3416 (class 1262 OID 16384)
-- Name: test_db; Type: DATABASE; Schema: -; Owner: dazai
--

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


ALTER DATABASE test_db OWNER TO dazai;

\connect test_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;

SET default_tablespace = '';

SET default_table_access_method = heap;

--
-- TOC entry 223 (class 1259 OID 16466)
-- Name: audience; Type: TABLE; Schema: public; Owner: dazai
--

CREATE TABLE public.audience (
    id integer NOT NULL,
    address character varying(32) NOT NULL,
    type character varying(16) NOT NULL,
    number character varying(8) NOT NULL
);
```

```
ALTER TABLE public.audience OWNER TO dazai;


--
-- TOC entry 222 (class 1259 OID 16465)
-- Name: audience_id_seq; Type: SEQUENCE; Schema: public; Owner: dazai
--

CREATE SEQUENCE public.audience_id_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER TABLE public.audience_id_seq OWNER TO dazai;


--
-- TOC entry 3417 (class 0 OID 0)
-- Dependencies: 222
-- Name: audience_id_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner:
dazai
--

ALTER SEQUENCE public.audience_id_seq OWNED BY public.audience.id;



--
-- TOC entry 225 (class 1259 OID 16473)
-- Name: education; Type: TABLE; Schema: public; Owner: dazai
--

CREATE TABLE public.education (
    id integer NOT NULL,
    group_id integer NOT NULL,
    listener_passport character varying(16) NOT NULL,
    status character varying(16) NOT NULL,
    doc_education_number character varying(32) NOT NULL
);


ALTER TABLE public.education OWNER TO dazai;


--
```

```sql
-- TOC entry 224 (class 1259 OID 16472)
-- Name: education_id_seq; Type: SEQUENCE; Schema: public; Owner: dazai
--

CREATE SEQUENCE public.education_id_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER TABLE public.education_id_seq OWNER TO dazai;


--
-- TOC entry 3418 (class 0 OID 0)
-- Dependencies: 224
-- Name: education_id_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner:
dazai
--

ALTER SEQUENCE public.education_id_seq OWNED BY public.education.id;



--
-- TOC entry 219 (class 1259 OID 16447)
-- Name: group; Type: TABLE; Schema: public; Owner: dazai
--

CREATE TABLE public."group" (
    id integer NOT NULL,
    program_id integer NOT NULL,
    group_number character varying(16) NOT NULL,
    capacity integer NOT NULL
);


ALTER TABLE public."group" OWNER TO dazai;


--
-- TOC entry 218 (class 1259 OID 16446)
-- Name: group_id_seq; Type: SEQUENCE; Schema: public; Owner: dazai
--
```

```sql
CREATE SEQUENCE public.group_id_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER TABLE public.group_id_seq OWNER TO dazai;

--
-- TOC entry 3419 (class 0 OID 0)
-- Dependencies: 218
-- Name: group_id_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner:
dazai
--

ALTER SEQUENCE public.group_id_seq OWNED BY public."group".id;


--
-- TOC entry 215 (class 1259 OID 16428)
-- Name: job_position; Type: TABLE; Schema: public; Owner: dazai
--

CREATE TABLE public.job_position (
    id integer NOT NULL,
    name character varying(32)
);


ALTER TABLE public.job_position OWNER TO dazai;

--
-- TOC entry 214 (class 1259 OID 16427)
-- Name: job_position_id_seq; Type: SEQUENCE; Schema: public; Owner: dazai
--

CREATE SEQUENCE public.job_position_id_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
```

```
    CACHE 1;


ALTER TABLE public.job_position_id_seq OWNER TO dazai;


--
-- TOC entry 3420 (class 0 OID 0)
-- Dependencies: 214
-- Name: job_position_id_seq; Type: SEQUENCE OWNED BY; Schema: public;
Owner: dazai
--

ALTER SEQUENCE public.job_position_id_seq OWNED BY public.job_position.id;



--
-- TOC entry 227 (class 1259 OID 16492)
-- Name: lesson; Type: TABLE; Schema: public; Owner: dazai
--

CREATE TABLE public.lesson (
    id integer NOT NULL,
    audience_id integer NOT NULL,
    teacher_id integer NOT NULL,
    subject_id integer NOT NULL,
    group_id integer NOT NULL,
    date date NOT NULL,
    state character varying(20),
    number integer NOT NULL,
    type character varying(16)
);


ALTER TABLE public.lesson OWNER TO dazai;


--
-- TOC entry 226 (class 1259 OID 16491)
-- Name: lesson_id_seq; Type: SEQUENCE; Schema: public; Owner: dazai
--

CREATE SEQUENCE public.lesson_id_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
```

```
        NO MAXVALUE
        CACHE 1;


ALTER TABLE public.lesson_id_seq OWNER TO dazai;


--
-- TOC entry 3421 (class 0 OID 0)
-- Dependencies: 226
-- Name: lesson_id_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner:
dazai
--

ALTER SEQUENCE public.lesson_id_seq OWNED BY public.lesson.id;



--
-- TOC entry 213 (class 1259 OID 16422)
-- Name: listener; Type: TABLE; Schema: public; Owner: dazai
--

CREATE TABLE public.listener (
    passport character varying(16) NOT NULL,
    name character varying(16) NOT NULL,
    last_name character varying(16) NOT NULL,
    contacts character varying(128)
);


ALTER TABLE public.listener OWNER TO dazai;

--
-- TOC entry 212 (class 1259 OID 16411)
-- Name: program; Type: TABLE; Schema: public; Owner: dazai
--

CREATE TABLE public.program (
    id integer NOT NULL,
    date_start date NOT NULL,
    date_end date NOT NULL,
    program_type_id integer NOT NULL
);


ALTER TABLE public.program OWNER TO dazai;
```

```
--
-- TOC entry 211 (class 1259 OID 16410)
-- Name: program_id_seq; Type: SEQUENCE; Schema: public; Owner: dazai
--

CREATE SEQUENCE public.program_id_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER TABLE public.program_id_seq OWNER TO dazai;


--
-- TOC entry 3422 (class 0 OID 0)
-- Dependencies: 211
-- Name: program_id_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner: dazai
--

ALTER SEQUENCE public.program_id_seq OWNED BY public.program.id;


--
-- TOC entry 210 (class 1259 OID 16386)
-- Name: program_type; Type: TABLE; Schema: public; Owner: dazai
--

CREATE TABLE public.program_type (
    id integer NOT NULL,
    qualification character varying(16) NOT NULL,
    document_type character varying(16) NOT NULL
);


ALTER TABLE public.program_type OWNER TO dazai;


--
-- TOC entry 209 (class 1259 OID 16385)
-- Name: program_type_id_seq; Type: SEQUENCE; Schema: public; Owner: dazai
--
```

```sql
CREATE SEQUENCE public.program_type_id_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER TABLE public.program_type_id_seq OWNER TO dazai;

--
-- TOC entry 3423 (class 0 OID 0)
-- Dependencies: 209
-- Name: program_type_id_seq; Type: SEQUENCE OWNED BY; Schema: public;
Owner: dazai
--

ALTER SEQUENCE public.program_type_id_seq OWNED BY
public.program_type.id;


--
-- TOC entry 221 (class 1259 OID 16459)
-- Name: subject; Type: TABLE; Schema: public; Owner: dazai
--

CREATE TABLE public.subject (
    id integer NOT NULL,
    name character varying(32) NOT NULL,
    lab_hours integer NOT NULL,
    lecture_hours integer NOT NULL,
    practice_hours integer NOT NULL
);


ALTER TABLE public.subject OWNER TO dazai;

--
-- TOC entry 220 (class 1259 OID 16458)
-- Name: subject_id_seq; Type: SEQUENCE; Schema: public; Owner: dazai
--

CREATE SEQUENCE public.subject_id_seq
```

```
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER TABLE public.subject_id_seq OWNER TO dazai;


--
-- TOC entry 3424 (class 0 OID 0)
-- Dependencies: 220
-- Name: subject_id_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner:
dazai
--

ALTER SEQUENCE public.subject_id_seq OWNED BY public.subject.id;



--
-- TOC entry 217 (class 1259 OID 16435)
-- Name: teacher; Type: TABLE; Schema: public; Owner: dazai
--

CREATE TABLE public.teacher (
    id integer NOT NULL,
    job_position_id integer NOT NULL,
    name character varying(16) NOT NULL,
    last_name character varying(16) NOT NULL,
    middle_name character varying(16)
);


ALTER TABLE public.teacher OWNER TO dazai;


--
-- TOC entry 216 (class 1259 OID 16434)
-- Name: teacher_id_seq; Type: SEQUENCE; Schema: public; Owner: dazai
--

CREATE SEQUENCE public.teacher_id_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
```

```
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER TABLE public.teacher_id_seq OWNER TO dazai;


--
-- TOC entry 3425 (class 0 OID 0)
-- Dependencies: 216
-- Name: teacher_id_seq; Type: SEQUENCE OWNED BY; Schema: public; Owner:
dazai
--

ALTER SEQUENCE public.teacher_id_seq OWNED BY public.teacher.id;



--
-- TOC entry 3217 (class 2604 OID 16469)
-- Name: audience id; Type: DEFAULT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.audience ALTER COLUMN id SET DEFAULT
nextval('public.audience_id_seq'::regclass);



--
-- TOC entry 3218 (class 2604 OID 16476)
-- Name: education id; Type: DEFAULT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.education ALTER COLUMN id SET DEFAULT
nextval('public.education_id_seq'::regclass);



--
-- TOC entry 3215 (class 2604 OID 16450)
-- Name: group id; Type: DEFAULT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public."group" ALTER COLUMN id SET DEFAULT
nextval('public.group_id_seq'::regclass);



--
```

-- TOC entry 3213 (class 2604 OID 16431)
-- Name: job_position id; Type: DEFAULT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.job_position ALTER COLUMN id SET DEFAULT
nextval('public.job_position_id_seq'::regclass);

--
-- TOC entry 3219 (class 2604 OID 16495)
-- Name: lesson id; Type: DEFAULT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.lesson ALTER COLUMN id SET DEFAULT
nextval('public.lesson_id_seq'::regclass);

--
-- TOC entry 3212 (class 2604 OID 16414)
-- Name: program id; Type: DEFAULT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.program ALTER COLUMN id SET DEFAULT
nextval('public.program_id_seq'::regclass);

--
-- TOC entry 3211 (class 2604 OID 16389)
-- Name: program_type id; Type: DEFAULT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.program_type ALTER COLUMN id SET DEFAULT
nextval('public.program_type_id_seq'::regclass);

--
-- TOC entry 3216 (class 2604 OID 16462)
-- Name: subject id; Type: DEFAULT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.subject ALTER COLUMN id SET DEFAULT
nextval('public.subject_id_seq'::regclass);

--

```
-- TOC entry 3214 (class 2604 OID 16438)
-- Name: teacher id; Type: DEFAULT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.teacher ALTER COLUMN id SET DEFAULT
nextval('public.teacher_id_seq'::regclass);


--
-- TOC entry 3406 (class 0 OID 16466)
-- Dependencies: 223
-- Data for Name: audience; Type: TABLE DATA; Schema: public; Owner: dazai
--

INSERT INTO public.audience (id, address, type, number) VALUES (1, 'Пушкина,
Калатушкина', 'Лекционная', '666');
INSERT INTO public.audience (id, address, type, number) VALUES (2, 'Пушкина,
Калатушкина', 'Лекционная', '123');
INSERT INTO public.audience (id, address, type, number) VALUES (7, 'Пушкина,
Калатушкина', 'Лекционная', '12');
INSERT INTO public.audience (id, address, type, number) VALUES (8, 'Пушкина,
Калатушкина', 'Лекционная', '54');
INSERT INTO public.audience (id, address, type, number) VALUES (5, 'Пушкина,
Калатушкина', 'Лекционная', '523');
INSERT INTO public.audience (id, address, type, number) VALUES (6, 'Пушкина,
Калатушкина', 'Лекционная', '643');
INSERT INTO public.audience (id, address, type, number) VALUES (9, 'Пушкина,
Калатушкина', 'Лекционная', '77');
INSERT INTO public.audience (id, address, type, number) VALUES (10, 'Пушкина,
Калатушкина', 'Лекционная', '32');
INSERT INTO public.audience (id, address, type, number) VALUES (3, 'Пушкина,
Калатушкина', 'Лекционная', '23');
INSERT INTO public.audience (id, address, type, number) VALUES (4, 'Пушкина,
Калатушкина', 'Лекционная', '421');


--
-- TOC entry 3408 (class 0 OID 16473)
-- Dependencies: 225
-- Data for Name: education; Type: TABLE DATA; Schema: public; Owner: dazai
--

INSERT INTO public.education (id, group_id, listener_passport, status,
doc_education_number) VALUES (1, 1, '99990000000', 'Обучается', '7612');
```

```sql
--
-- TOC entry 3402 (class 0 OID 16447)
-- Dependencies: 219
-- Data for Name: group; Type: TABLE DATA; Schema: public; Owner: dazai
--

INSERT INTO public."group" (id, program_id, group_number, capacity) VALUES (1, 1, 'K3166', 40);


--
-- TOC entry 3398 (class 0 OID 16428)
-- Dependencies: 215
-- Data for Name: job_position; Type: TABLE DATA; Schema: public; Owner: dazai
--

INSERT INTO public.job_position (id, name) VALUES (2, 'Лектор Дискретной математики');


--
-- TOC entry 3410 (class 0 OID 16492)
-- Dependencies: 227
-- Data for Name: lesson; Type: TABLE DATA; Schema: public; Owner: dazai
--

INSERT INTO public.lesson (id, audience_id, teacher_id, subject_id, group_id, date, state, number, type) VALUES (1, 1, 1, 1, 1, '2022-02-24', 'Проведена', 1, 'Лекция');


--
-- TOC entry 3396 (class 0 OID 16422)
-- Dependencies: 213
-- Data for Name: listener; Type: TABLE DATA; Schema: public; Owner: dazai
--

INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('99990000000', 'Абурахман', 'Хатаб', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('1', 'Джон', 'Уик', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('2', 'Чак', 'Норрис', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('3', 'Эрен', 'Егерь', '+79999999999');
```

```sql
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('4', 'Йохан', 'Либберт', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('5', 'Рик', 'Санчес', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('6', 'Name1', 'LastName1', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('7', 'Name2', 'LastName2', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('8', 'Name3', 'LastName3', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('9', 'Name4', 'LastName4', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('10', 'Name5', 'LastName5', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('11', 'Name6', 'LastName6', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('12', 'Name7', 'LastName7', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('13', 'Name8', 'LastName8', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('14', 'Name9', 'LastName9', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('15', 'Name10', 'LastName10', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('16', 'Name11', 'LastName11', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('17', 'Name12', 'LastName12', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('18', 'Name13', 'LastName13', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('19', 'Name14', 'LastName14', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('20', 'Name15', 'LastName15', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('21', 'Name16', 'LastName16', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('22', 'Name17', 'LastName17', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('23', 'Name18', 'LastName18', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('24', 'Name19', 'LastName19', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('25', 'Name20', 'LastName20', '+79999999999');
```

INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('26', 'Name21', 'LastName21', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('27', 'Name22', 'LastName22', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('28', 'Name23', 'LastName23', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('29', 'Name24', 'LastName24', '+79999999999');
INSERT INTO public.listener (passport, name, last_name, contacts) VALUES ('30', 'Name25', 'LastName25', '+79999999999');

--
-- TOC entry 3395 (class 0 OID 16411)
-- Dependencies: 212
-- Data for Name: program; Type: TABLE DATA; Schema: public; Owner: dazai
--

INSERT INTO public.program (id, date_start, date_end, program_type_id) VALUES (1, '2020-09-01', '2024-06-30', 1);

--
-- TOC entry 3393 (class 0 OID 16386)
-- Dependencies: 210
-- Data for Name: program_type; Type: TABLE DATA; Schema: public; Owner: dazai
--

INSERT INTO public.program_type (id, qualification, document_type) VALUES (1, 'Полное высшее', 'Диплом');

--
-- TOC entry 3404 (class 0 OID 16459)
-- Dependencies: 221
-- Data for Name: subject; Type: TABLE DATA; Schema: public; Owner: dazai
--

INSERT INTO public.subject (id, name, lab_hours, lecture_hours, practice_hours) VALUES (1, 'Дискретная Математика', 4, 0, 0);

--
-- TOC entry 3400 (class 0 OID 16435)
-- Dependencies: 217

```sql
-- Data for Name: teacher; Type: TABLE DATA; Schema: public; Owner: dazai
--

INSERT INTO public.teacher (id, job_position_id, name, last_name, middle_name)
VALUES (1, 2, 'Жмышенко', 'Валерий', 'Альбертович');


--
-- TOC entry 3426 (class 0 OID 0)
-- Dependencies: 222
-- Name: audience_id_seq; Type: SEQUENCE SET; Schema: public; Owner: dazai
--

SELECT pg_catalog.setval('public.audience_id_seq', 10, true);


--
-- TOC entry 3427 (class 0 OID 0)
-- Dependencies: 224
-- Name: education_id_seq; Type: SEQUENCE SET; Schema: public; Owner: dazai
--

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


--
-- TOC entry 3428 (class 0 OID 0)
-- Dependencies: 218
-- Name: group_id_seq; Type: SEQUENCE SET; Schema: public; Owner: dazai
--

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


--
-- TOC entry 3429 (class 0 OID 0)
-- Dependencies: 214
-- Name: job_position_id_seq; Type: SEQUENCE SET; Schema: public; Owner: dazai
--

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


--
-- TOC entry 3430 (class 0 OID 0)
```

```
-- Dependencies: 226
-- Name: lesson_id_seq; Type: SEQUENCE SET; Schema: public; Owner: dazai
--

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


--
-- TOC entry 3431 (class 0 OID 0)
-- Dependencies: 211
-- Name: program_id_seq; Type: SEQUENCE SET; Schema: public; Owner: dazai
--

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


--
-- TOC entry 3432 (class 0 OID 0)
-- Dependencies: 209
-- Name: program_type_id_seq; Type: SEQUENCE SET; Schema: public; Owner: dazai
--

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


--
-- TOC entry 3433 (class 0 OID 0)
-- Dependencies: 220
-- Name: subject_id_seq; Type: SEQUENCE SET; Schema: public; Owner: dazai
--

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


--
-- TOC entry 3434 (class 0 OID 0)
-- Dependencies: 216
-- Name: teacher_id_seq; Type: SEQUENCE SET; Schema: public; Owner: dazai
--

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


--
```

-- TOC entry 3235 (class 2606 OID 16471)
-- Name: audience audience_pk; Type: CONSTRAINT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.audience
    ADD CONSTRAINT audience_pk PRIMARY KEY (id);

--
-- TOC entry 3237 (class 2606 OID 16478)
-- Name: education education_pk; Type: CONSTRAINT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.education
    ADD CONSTRAINT education_pk PRIMARY KEY (id);

--
-- TOC entry 3239 (class 2606 OID 16529)
-- Name: education education_sk_2; Type: CONSTRAINT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.education
    ADD CONSTRAINT education_sk_2 UNIQUE (group_id, listener_passport);

--
-- TOC entry 3231 (class 2606 OID 16452)
-- Name: group group_pk; Type: CONSTRAINT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public."group"
    ADD CONSTRAINT group_pk PRIMARY KEY (id);

--
-- TOC entry 3227 (class 2606 OID 16433)
-- Name: job_position job_position_pk; Type: CONSTRAINT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.job_position

```
        ADD CONSTRAINT job_position_pk PRIMARY KEY (id);


--
-- TOC entry 3241 (class 2606 OID 16497)
-- Name: lesson lesson_pk; Type: CONSTRAINT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.lesson
    ADD CONSTRAINT lesson_pk PRIMARY KEY (id);


--
-- TOC entry 3243 (class 2606 OID 16499)
-- Name: lesson lesson_pk_2; Type: CONSTRAINT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.lesson
    ADD CONSTRAINT lesson_pk_2 UNIQUE (audience_id, teacher_id, subject_id,
group_id);


--
-- TOC entry 3225 (class 2606 OID 16523)
-- Name: listener listener_pk; Type: CONSTRAINT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.listener
    ADD CONSTRAINT listener_pk PRIMARY KEY (passport);


--
-- TOC entry 3223 (class 2606 OID 16421)
-- Name: program program_pk; Type: CONSTRAINT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.program
    ADD CONSTRAINT program_pk PRIMARY KEY (id);


--
-- TOC entry 3221 (class 2606 OID 16391)
-- Name: program_type program_type_pk; Type: CONSTRAINT; Schema: public;
Owner: dazai
--
```

```sql
ALTER TABLE ONLY public.program_type
    ADD CONSTRAINT program_type_pk PRIMARY KEY (id);


--
-- TOC entry 3233 (class 2606 OID 16464)
-- Name: subject subject_pk; Type: CONSTRAINT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.subject
    ADD CONSTRAINT subject_pk PRIMARY KEY (id);


--
-- TOC entry 3229 (class 2606 OID 16440)
-- Name: teacher teacher_pk; Type: CONSTRAINT; Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.teacher
    ADD CONSTRAINT teacher_pk PRIMARY KEY (id);


--
-- TOC entry 3247 (class 2606 OID 16479)
-- Name: education education_group_id__fk; Type: FK CONSTRAINT; Schema:
public; Owner: dazai
--

ALTER TABLE ONLY public.education
    ADD CONSTRAINT education_group_id__fk FOREIGN KEY (group_id)
REFERENCES public."group"(id);


--
-- TOC entry 3248 (class 2606 OID 16535)
-- Name: education education_listener_passport__fk; Type: FK CONSTRAINT;
Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.education
    ADD CONSTRAINT education_listener_passport__fk FOREIGN KEY
(listener_passport) REFERENCES public.listener(passport);
```

```
--
-- TOC entry 3246 (class 2606 OID 16453)
-- Name: group group_program_id__fk; Type: FK CONSTRAINT; Schema: public;
Owner: dazai
--

ALTER TABLE ONLY public."group"
    ADD CONSTRAINT group_program_id__fk FOREIGN KEY (program_id)
REFERENCES public.program(id);


--
-- TOC entry 3249 (class 2606 OID 16500)
-- Name: lesson lesson_audience_id__fk; Type: FK CONSTRAINT; Schema: public;
Owner: dazai
--

ALTER TABLE ONLY public.lesson
    ADD CONSTRAINT lesson_audience_id__fk FOREIGN KEY (audience_id)
REFERENCES public.audience(id);


--
-- TOC entry 3252 (class 2606 OID 16515)
-- Name: lesson lesson_group_id__fk; Type: FK CONSTRAINT; Schema: public;
Owner: dazai
--

ALTER TABLE ONLY public.lesson
    ADD CONSTRAINT lesson_group_id__fk FOREIGN KEY (group_id) REFERENCES
public."group"(id);


--
-- TOC entry 3251 (class 2606 OID 16510)
-- Name: lesson lesson_subject_id__fk; Type: FK CONSTRAINT; Schema: public;
Owner: dazai
--

ALTER TABLE ONLY public.lesson
    ADD CONSTRAINT lesson_subject_id__fk FOREIGN KEY (subject_id)
REFERENCES public.subject(id);


--
```

```
-- TOC entry 3250 (class 2606 OID 16505)
-- Name: lesson lesson_teacher_id__fk; Type: FK CONSTRAINT; Schema: public;
Owner: dazai
--

ALTER TABLE ONLY public.lesson
    ADD CONSTRAINT lesson_teacher_id__fk FOREIGN KEY (teacher_id)
REFERENCES public.teacher(id);


--
-- TOC entry 3244 (class 2606 OID 16415)
-- Name: program program_program_type_id__fk; Type: FK CONSTRAINT;
Schema: public; Owner: dazai
--

ALTER TABLE ONLY public.program
    ADD CONSTRAINT program_program_type_id__fk FOREIGN KEY
(program_type_id) REFERENCES public.program_type(id) ON DELETE CASCADE;


--
-- TOC entry 3245 (class 2606 OID 16441)
-- Name: teacher teacher_job_position_id__fk; Type: FK CONSTRAINT; Schema:
public; Owner: dazai
--

ALTER TABLE ONLY public.teacher
    ADD CONSTRAINT teacher_job_position_id__fk FOREIGN KEY (job_position_id)
REFERENCES public.job_position(id) ON DELETE CASCADE;


-- Completed on 2022-03-03 15:54:45 UTC


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

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