

**Министерство науки и высшего образования Российской Федерации
ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ АВТОНОМНОЕ ОБРАЗОВАТЕЛЬНОЕ
УЧРЕЖДЕНИЕ ВЫСШЕГО ОБРАЗОВАНИЯ
НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ ИТМО**

ОТЧЕТ

по Лабораторной работе № 3

**«СОЗДАНИЕ ТАБЛИЦ БАЗЫ ДАННЫХ POSTGRESQL. ЗАПОЛНЕНИЕ
ТАБЛИЦ РАБОЧИМИ ДАННЫМИ»**

по дисциплине «Проектирование и реализация баз данных»

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Группа К3241

Направление подготовки 09.03.03 Прикладная информатика

Образовательная программа Мобильные и сетевые технологии 2023

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Санкт-Петербург
2024/2025

СОДЕРЖАНИЕ

ВВЕДЕНИЕ.....	3
1 Индивидуальное задание (вариант).....	4
2 Выполнение.....	6
2.1 Название создаваемой базы данных.....	6
2.2 схема инфологической модели БД ЛР 2 (IDEF1X).....	6
2.2 Схема логической модели базы данных Generate ERD.....	7
2.4 dump, содержащий скрипты работы с БД.....	8
ЗАКЛЮЧЕНИЕ.....	17
СПИСОК ИСПОЛЬЗОВАННЫХ ИСТОЧНИКОВ.....	18

ВВЕДЕНИЕ

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.

1 Индивидуальное задание (вариант)

Вариант 7. БД «Курсы» (допустимо к выполнению для команды из 2-х студентов).

Описание предметной области: Сеть учебных подразделений НОУ ДПО занимается организацией внебюджетного образования.

Имеется несколько образовательных программ краткосрочных курсов, предназначенных для определенных специальностей, связанных с программным обеспечением ИТ. Каждая программа имеет определенную длительность (в академических часах), свой перечень изучаемых дисциплин, вид итоговой аттестации, вид документа об окончании программы (сертификат о повышении квалификации, удостоверение о повышении квалификации, диплом о профпереподготовке).

Одна дисциплина может относиться к нескольким программам.

На каждую программу может быть набрано несколько групп обучающихся.

По каждой дисциплине могут проводиться лекционные, лабораторные/практические занятия и практика в определенном объеме часов. По каждой дисциплине и практике проводится аттестация в формате экзамен/дифзачет/зачет.

Необходимо хранить информацию по аттестации обучающихся.

Подразделение обеспечивает следующие ресурсы: учебные классы, лекционные аудитории и преподавателей. Необходимо составить расписание занятий.

В системе необходимо хранить информацию о номере выданного документа об окончании программы и дату выдачи.

БД должна содержать следующий минимальный набор сведений: Фамилия слушателя. Имя слушателя. Паспортные данные. Контакты. Код программы. Программа. Тип программы. Объем часов. Номер группы. максимальное количество человек в группе (для набора). Дата начала

обучения. Дата окончания обучения. Название дисциплины. Количество часов. Дата занятий. Номер пары. Номер аудитории. Тип аудитории. Адрес площадки. Вид занятий (лекционные, практические или лабораторные). Фамилия преподавателя. Имя и отчество преподавателя. Должность преподавателя. Дисциплины, которые может вести преподаватель.

Дополните состав атрибутов на основе анализа предметной области.

Задание 1.1 (ЛР 1 БД). Выполните инфологическое моделирование базы данных системы. (Ограничения задать самостоятельно).

Задание 1.2. Создайте логическую модель БД, используя ИЛМ (задание 1.1). Используйте необходимые средства поддержки целостности данных в СУБД.

2 Выполнение

2.1 Название создаваемой базы данных

Название базы данных - «Курсы».

Изучение предметной области:

База данных разрабатывается для сети учебных подразделений НОУ ДПО, организующих программы внебюджетного образования.

Основная задача системы — составление расписания, поддержка образовательных программ краткосрочных курсов, направленных на повышение квалификации и профессиональную переподготовку в области ИТ.

Курсы включают теоретические и практические занятия по различным дисциплинам и завершаются аттестацией с выдачей документа об окончании.

Необходимый минимальный набор данных для хранения охватывает информацию о студентах, программах, дисциплинах, группах, преподавателях и учебных ресурсах (аудиториях и расписании занятий).

2.2 схема инфологической модели БД ЛР 2 (IDEF1X)

После проведения анализа атрибутов сущностей и их взаимосвязей, в онлайн-сервисе Draw.io [1] была построена схема инфологической модели данных БД в нотации Питера Чена-Кириллова, а затем и в нотации IDEF1X (рисунок 1).

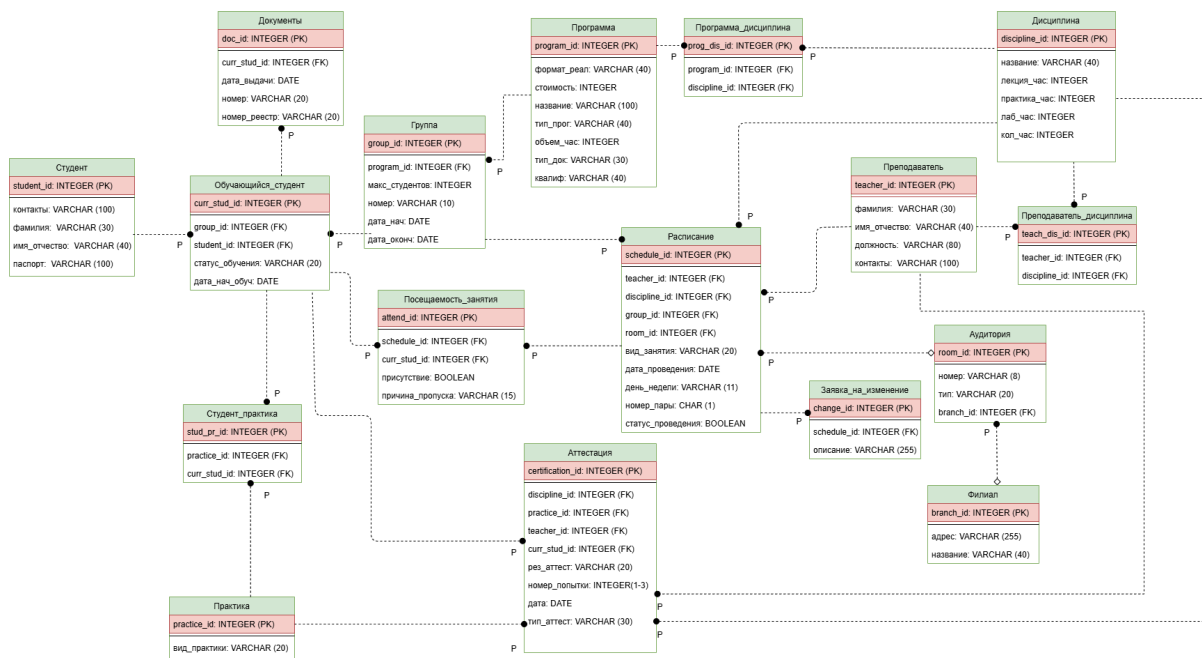


Рисунок 1 – Схема инфологической модели данных БД в нотации IDEF1X [3]

2.2 Схема логической модели базы данных Generate ERD

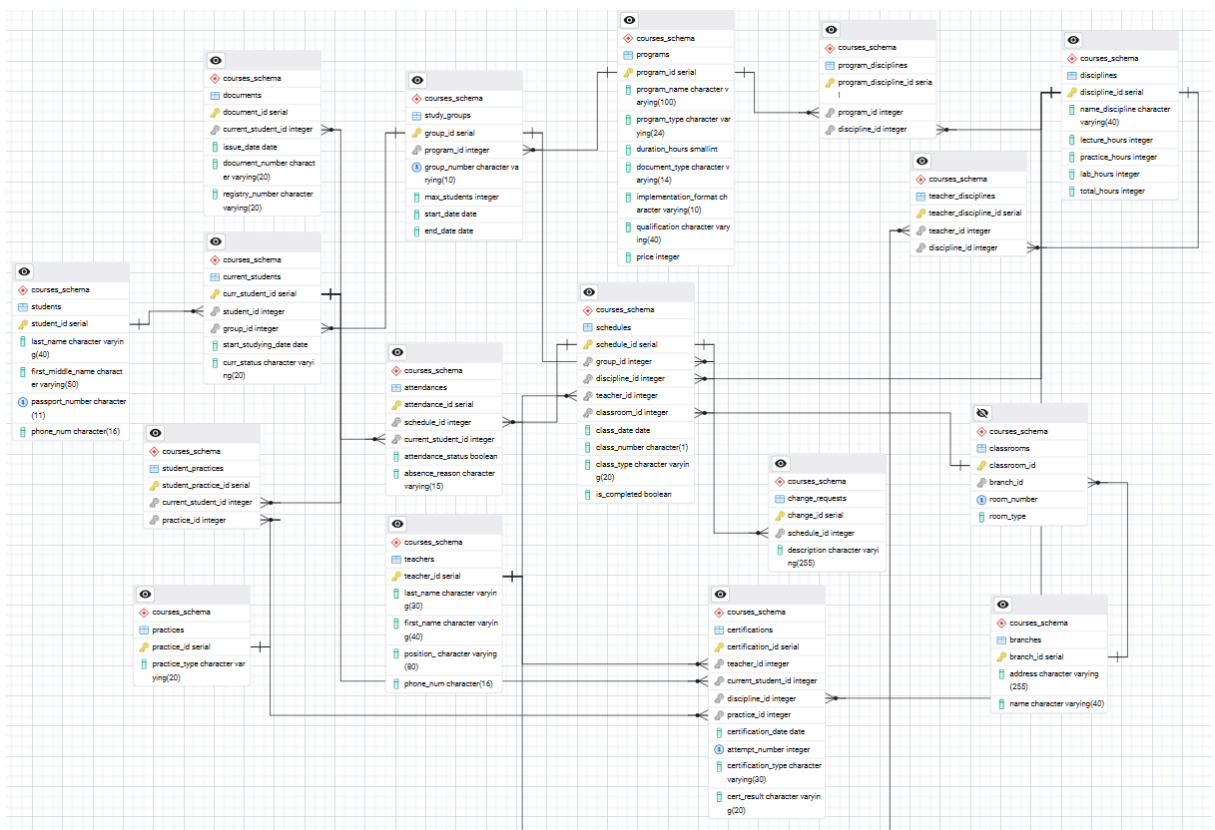


Рисунок 2 – Схема логической модели базы данных, сгенерированная в Generate ERD (в соответствии с лабораторной работой 2)

2.4 dump, содержащий скрипты работы с БД

Для создания резервной копии базы данных «Курсы» я сначала нашла её в дереве объектов слева в pgAdmin. Затем, щёлкнув по базе данных правой кнопкой мыши, выбрала пункт «Backup...». В открывшемся окне настроек резервного копирования я указала путь и имя файла, и выбрала формат «Custom». В разделе «Dump options» для «Type of objects» отметила необходимые параметры из предложенных: «Only data» - сохранить только данные, «Only schema» для сохранения только структуры, а я выбрала «Blobs» для включения всех бинарных объектов. В разделе «Queries» я включила опции «Use INSERT commands» для сохранения данных в виде INSERT-запросов и «Include CREATE DATABASE statement» для добавления команды создания базы в дамп.

После настройки всех параметров нажала кнопку «Backup», чтобы запустить процесс создания резервной копии.

Аналогично я создала резервную копию в формате PLAIN. Для этого снова щёлкнула правой кнопкой мыши по базе данных и выбрала «Backup...», указала путь и имя файла, и выбрала формат «Plain». Параметры в разделе «Dump options» для «Type of objects» и «Queries» были настроены так же, как и для формата CUSTOM: отмечены «Only data», «Only schema», «Blobs», «Use INSERT commands» и «Include CREATE DATABASE statement». После этого я запустила процесс резервного копирования, нажав кнопку «Backup».

Таким образом, были созданы две резервные копии базы данных, одна в формате CUSTOM для восстановления, а другая в формате PLAIN для текстового листинга в отчёте.

```
-- Создание схемы базы данных
CREATE SCHEMA courses_schema;

-- 1. Таблица Студент (не зависит ни от каких других таблиц)
CREATE TABLE courses_schema.students (
  student_id SERIAL PRIMARY KEY,
  last_name VARCHAR(40) NOT NULL
    CHECK (last_name ~ '^[A-Za-zА-Яа-яЁё]+$', -- только буквы
  first_middle_name VARCHAR(50) NOT NULL
    CHECK (first_middle_name ~ '^[A-Za-zА-Яа-яЁё ]+$'), -- только буквы и пробел
  passport_number CHAR(11) NOT NULL UNIQUE
    CHECK (passport_number ~ '^\\d{4} \\d{6}$'), -- серия номер: 4 цифры, пробел, 6 цифр
  phone_num CHAR(16) NOT NULL
    CHECK (phone_num ~ '^\\+7-\\d{3}-\\d{3}-\\d{2}-\\d{2}$') -- например, +7-930-786-7345
);
```



```

---
-- PostgreSQL database dump
--

-- Dumped from database version 16.9
-- Dumped by pg_dump version 16.9

-- Started on 2025-05-26 15:16:04

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 5125 (class 1262 OID 21186)
-- Name: new_db_courses; Type: DATABASE; Schema: -; Owner: postgres
--

CREATE DATABASE new_db_courses WITH TEMPLATE = template0 ENCODING = 'UTF8' LOCALE_PROVIDER = libc LOCALE =
'Russian_Russia.1251';

ALTER DATABASE new_db_courses OWNER TO postgres;

\connect new_db_courses

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 21187)
-- Name: courses_schema; Type: SCHEMA; Schema: -; Owner: postgres
--

CREATE SCHEMA courses_schema;

ALTER SCHEMA courses_schema OWNER TO postgres;

SET default_tablespace = '';

SET default_table_access_method = heap;

--
-- TOC entry 247 (class 1259 OID 21406)
-- Name: attendances; Type: TABLE; Schema: courses_schema; Owner: postgres
--

CREATE TABLE courses_schema.attendances (
    attendance_id integer NOT NULL,
    schedule_id integer NOT NULL,
    current_student_id integer NOT NULL,
    attendance_status boolean NOT NULL,
    absence_reason character varying(15),
    CONSTRAINT attendances_absence_reason_check CHECK (((absence_reason)::text = ANY ((ARRAY['valid'::character varying,
'invalid'::character varying])::text[])))
);

```

```

ALTER TABLE courses_schema.attendances OWNER TO postgres;

--
-- TOC entry 246 (class 1259 OID 21405)
-- Name: attendances_attendance_id_seq; Type: SEQUENCE; Schema: courses_schema; Owner: postgres
--

CREATE SEQUENCE courses_schema.attendances_attendance_id_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;

ALTER SEQUENCE courses_schema.attendances_attendance_id_seq OWNER TO postgres;

--
-- TOC entry 5126 (class 0 OID 0)
-- Dependencies: 246
-- Name: attendances_attendance_id_seq; Type: SEQUENCE OWNED BY; Schema: courses_schema; Owner: postgres
--

ALTER SEQUENCE courses_schema.attendances_attendance_id_seq OWNED BY courses_schema.attendances.attendance_id;

--
-- TOC entry 239 (class 1259 OID 21343)
-- Name: branches; Type: TABLE; Schema: courses_schema; Owner: postgres
--

CREATE TABLE courses_schema.branches (
    branch_id integer NOT NULL,
    address character varying(255) NOT NULL,
    name character varying(40) NOT NULL
);

ALTER TABLE courses_schema.branches OWNER TO postgres;

--
-- TOC entry 238 (class 1259 OID 21342)
-- Name: branches_branch_id_seq; Type: SEQUENCE; Schema: courses_schema; Owner: postgres
--

CREATE SEQUENCE courses_schema.branches_branch_id_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;

ALTER SEQUENCE courses_schema.branches_branch_id_seq OWNER TO postgres;

--
-- TOC entry 5127 (class 0 OID 0)
-- Dependencies: 238
-- Name: branches_branch_id_seq; Type: SEQUENCE OWNED BY; Schema: courses_schema; Owner: postgres
--

ALTER SEQUENCE courses_schema.branches_branch_id_seq OWNED BY courses_schema.branches.branch_id;

--
-- TOC entry 249 (class 1259 OID 21489)
-- Name: certifications; Type: TABLE; Schema: courses_schema; Owner: postgres
--

CREATE TABLE courses_schema.certifications (
    certification_id integer NOT NULL,
    teacher_id integer NOT NULL,

```

```

current_student_id integer NOT NULL,
discipline_id integer,
practice_id integer,
certification_date date NOT NULL,
attempt_number integer NOT NULL,
certification_type character varying(30) NOT NULL,
cert_result character varying(20) NOT NULL,
CONSTRAINT certifications_attempt_number_check CHECK (((attempt_number >= 1) AND (attempt_number <= 3))),
CONSTRAINT certifications_cert_result_check CHECK (((cert_result)::text = ANY ((ARRAY['зачтено':character varying,
'незачтено':character varying, 'неудовлетворительно':character varying, 'удовлетворительно':character varying, 'хорошо':character
varying, 'отлично':character varying]))::text[])),
CONSTRAINT certifications_certification_type_check CHECK (((certification_type)::text = ANY ((ARRAY['exam':character varying,
'differentiated_test':character varying, 'test':character varying]))::text[])),
CONSTRAINT certifications_check CHECK (((((certification_type)::text = 'test'::text) AND ((cert_result)::text = ANY
((ARRAY['зачтено':character varying, 'незачтено':character varying]))::text[]))) OR (((certification_type)::text = ANY
((ARRAY['exam':character varying, 'differentiated_test':character varying]))::text[])) AND ((cert_result)::text = ANY
((ARRAY['неудовлетворительно':character varying, 'удовлетворительно':character varying, 'хорошо':character varying,
'отлично':character varying]))::text[])))),
CONSTRAINT certifications_check1 CHECK (((discipline_id IS NOT NULL) OR (practice_id IS NOT NULL)))
);

```

```

ALTER TABLE courses_schema.certifications OWNER TO postgres;

```

```

--
-- TOC entry 248 (class 1259 OID 21488)
-- Name: certifications_certification_id_seq; Type: SEQUENCE; Schema: courses_schema; Owner: postgres
--

```

```

CREATE SEQUENCE courses_schema.certifications_certification_id_seq
AS integer
START WITH 1
INCREMENT BY 1
NO MINVALUE
NO MAXVALUE
CACHE 1;

```

```

ALTER SEQUENCE courses_schema.certifications_certification_id_seq OWNER TO postgres;

```

```

--
-- TOC entry 5128 (class 0 OID 0)
-- Dependencies: 248
-- Name: certifications_certification_id_seq; Type: SEQUENCE OWNED BY; Schema: courses_schema; Owner: postgres
--

```

```

ALTER SEQUENCE courses_schema.certifications_certification_id_seq OWNED BY courses_schema.certifications.certification_id;

```

```

--
-- TOC entry 245 (class 1259 OID 21394)
-- Name: change_requests; Type: TABLE; Schema: courses_schema; Owner: postgres
--

```

```

CREATE TABLE courses_schema.change_requests (
change_id integer NOT NULL,
schedule_id integer NOT NULL,
description character varying(255) NOT NULL
);

```

```

ALTER TABLE courses_schema.change_requests OWNER TO postgres;

```

```

--
-- TOC entry 244 (class 1259 OID 21393)
-- Name: change_requests_change_id_seq; Type: SEQUENCE; Schema: courses_schema; Owner: postgres
--

```

```

CREATE SEQUENCE courses_schema.change_requests_change_id_seq
AS integer
START WITH 1
INCREMENT BY 1
NO MINVALUE
NO MAXVALUE
CACHE 1;

```

```

ALTER SEQUENCE courses_schema.change_requests_change_id_seq OWNER TO postgres;

--
-- TOC entry 5129 (class 0 OID 0)
-- Dependencies: 244
-- Name: change_requests_change_id_seq; Type: SEQUENCE OWNED BY; Schema: courses_schema; Owner: postgres
--

ALTER SEQUENCE courses_schema.change_requests_change_id_seq OWNED BY courses_schema.change_requests.change_id;

--
-- TOC entry 241 (class 1259 OID 21350)
-- Name: classrooms; Type: TABLE; Schema: courses_schema; Owner: postgres
--

CREATE TABLE courses_schema.classrooms (
    classroom_id integer NOT NULL,
    branch_id integer NOT NULL,
    room_number character varying(8) NOT NULL,
    room_type character varying(20) NOT NULL,
    capacity integer,
    CONSTRAINT classrooms_room_type_check CHECK (((room_type)::text = ANY ((ARRAY['lecture'::character varying, 'lab'::character varying, 'practice'::character varying])::text[])))
);

ALTER TABLE courses_schema.classrooms OWNER TO postgres;

--
-- TOC entry 240 (class 1259 OID 21349)
-- Name: classrooms_classroom_id_seq; Type: SEQUENCE; Schema: courses_schema; Owner: postgres
--

CREATE SEQUENCE courses_schema.classrooms_classroom_id_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;

ALTER SEQUENCE courses_schema.classrooms_classroom_id_seq OWNER TO postgres;

--
-- TOC entry 5130 (class 0 OID 0)
-- Dependencies: 240
-- Name: classrooms_classroom_id_seq; Type: SEQUENCE OWNED BY; Schema: courses_schema; Owner: postgres
--

ALTER SEQUENCE courses_schema.classrooms_classroom_id_seq OWNED BY courses_schema.classrooms.classroom_id;

--
-- TOC entry 223 (class 1259 OID 21229)
-- Name: current_students; Type: TABLE; Schema: courses_schema; Owner: postgres
--

CREATE TABLE courses_schema.current_students (
    curr_student_id integer NOT NULL,
    student_id integer NOT NULL,
    group_id integer NOT NULL,
    start_studying_date date NOT NULL,
    curr_status character varying(20) NOT NULL,
    expulsion_date date,
    CONSTRAINT current_students_curr_status_check CHECK (((curr_status)::text = ANY ((ARRAY['обучается'::character varying, 'отчислен'::character varying, 'академический_отпуск'::character varying, 'выпускник'::character varying])::text[])))
);

ALTER TABLE courses_schema.current_students OWNER TO postgres;

```

```

--
-- TOC entry 222 (class 1259 OID 21228)
-- Name: current_students_curr_student_id_seq; Type: SEQUENCE; Schema: courses_schema; Owner: postgres
--

CREATE SEQUENCE courses_schema.current_students_curr_student_id_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;

ALTER SEQUENCE courses_schema.current_students_curr_student_id_seq OWNER TO postgres;

--
-- TOC entry 5131 (class 0 OID 0)
-- Dependencies: 222
-- Name: current_students_curr_student_id_seq; Type: SEQUENCE OWNED BY; Schema: courses_schema; Owner: postgres
--

ALTER SEQUENCE courses_schema.current_students_curr_student_id_seq OWNED BY
courses_schema.current_students_curr_student_id;

--
-- TOC entry 227 (class 1259 OID 21259)
-- Name: disciplines; Type: TABLE; Schema: courses_schema; Owner: postgres
--

CREATE TABLE courses_schema.disciplines (
    discipline_id integer NOT NULL,
    name_discipline character varying(40) NOT NULL,
    lecture_hours integer DEFAULT 0,
    practice_hours integer DEFAULT 0,
    lab_hours integer DEFAULT 0,
    total_hours integer NOT NULL,
    CONSTRAINT disciplines_check CHECK (((total_hours = ((lecture_hours + practice_hours) + lab_hours)) AND (total_hours >= 0)))
);

ALTER TABLE courses_schema.disciplines OWNER TO postgres;

--
-- TOC entry 226 (class 1259 OID 21258)
-- Name: disciplines_discipline_id_seq; Type: SEQUENCE; Schema: courses_schema; Owner: postgres
--

CREATE SEQUENCE courses_schema.disciplines_discipline_id_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;

ALTER SEQUENCE courses_schema.disciplines_discipline_id_seq OWNER TO postgres;

--
-- TOC entry 5132 (class 0 OID 0)
-- Dependencies: 226
-- Name: disciplines_discipline_id_seq; Type: SEQUENCE OWNED BY; Schema: courses_schema; Owner: postgres
--

ALTER SEQUENCE courses_schema.disciplines_discipline_id_seq OWNED BY courses_schema.disciplines.discipline_id;

--
-- TOC entry 225 (class 1259 OID 21247)
-- Name: documents; Type: TABLE; Schema: courses_schema; Owner: postgres
--

CREATE TABLE courses_schema.documents (

```

```

document_id integer NOT NULL,
current_student_id integer NOT NULL,
issue_date date NOT NULL,
document_number character varying(20) NOT NULL,
registry_number character varying(20)
);

ALTER TABLE courses_schema.documents OWNER TO postgres;

--
-- TOC entry 224 (class 1259 OID 21246)
-- Name: documents_document_id_seq; Type: SEQUENCE; Schema: courses_schema; Owner: postgres
--

CREATE SEQUENCE courses_schema.documents_document_id_seq
AS integer
START WITH 1
INCREMENT BY 1
NO MINVALUE
NO MAXVALUE
CACHE 1;

ALTER SEQUENCE courses_schema.documents_document_id_seq OWNER TO postgres;

--
-- TOC entry 5133 (class 0 OID 0)
-- Dependencies: 224
-- Name: documents_document_id_seq; Type: SEQUENCE OWNED BY; Schema: courses_schema; Owner: postgres
--

ALTER SEQUENCE courses_schema.documents_document_id_seq OWNED BY courses_schema.documents.document_id;

--
-- TOC entry 231 (class 1259 OID 21289)
-- Name: practices; Type: TABLE; Schema: courses_schema; Owner: postgres
--

CREATE TABLE courses_schema.practices (
practice_id integer NOT NULL,
practice_type character varying(20) NOT NULL,
CONSTRAINT practices_practice_type_check CHECK (((practice_type)::text = ANY ((ARRAY['educational'::character varying,
'industrial'::character varying])::text[])))
);

ALTER TABLE courses_schema.practices OWNER TO postgres;

--
-- TOC entry 230 (class 1259 OID 21288)
-- Name: practices_practice_id_seq; Type: SEQUENCE; Schema: courses_schema; Owner: postgres
--

CREATE SEQUENCE courses_schema.practices_practice_id_seq
AS integer
START WITH 1
INCREMENT BY 1
NO MINVALUE
NO MAXVALUE
CACHE 1;

ALTER SEQUENCE courses_schema.practices_practice_id_seq OWNER TO postgres;

--
-- TOC entry 5134 (class 0 OID 0)
-- Dependencies: 230
-- Name: practices_practice_id_seq; Type: SEQUENCE OWNED BY; Schema: courses_schema; Owner: postgres
--

ALTER SEQUENCE courses_schema.practices_practice_id_seq OWNED BY courses_schema.practices.practice_id;

```

```

--
-- TOC entry 229 (class 1259 OID 21270)
-- Name: program_disciplines; Type: TABLE; Schema: courses_schema; Owner: postgres
--

CREATE TABLE courses_schema.program_disciplines (
    program_discipline_id integer NOT NULL,
    program_id integer NOT NULL,
    discipline_id integer NOT NULL
);

ALTER TABLE courses_schema.program_disciplines OWNER TO postgres;

--
-- TOC entry 228 (class 1259 OID 21269)
-- Name: program_disciplines_program_discipline_id_seq; Type: SEQUENCE; Schema: courses_schema; Owner: postgres
--

CREATE SEQUENCE courses_schema.program_disciplines_program_discipline_id_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;

ALTER SEQUENCE courses_schema.program_disciplines_program_discipline_id_seq OWNER TO postgres;

--
-- TOC entry 5135 (class 0 OID 0)
-- Dependencies: 228
-- Name: program_disciplines_program_discipline_id_seq; Type: SEQUENCE OWNED BY; Schema: courses_schema; Owner: postgres
--

ALTER SEQUENCE courses_schema.program_disciplines_program_discipline_id_seq OWNED BY
courses_schema.program_disciplines.program_discipline_id;

--
-- TOC entry 251 (class 1259 OID 22345)
-- Name: program_practices; Type: TABLE; Schema: courses_schema; Owner: postgres
--

CREATE TABLE courses_schema.program_practices (
    program_practice_id integer NOT NULL,
    program_id integer,
    practice_id integer
);

ALTER TABLE courses_schema.program_practices OWNER TO postgres;

--
-- TOC entry 250 (class 1259 OID 22344)
-- Name: program_practices_program_practice_id_seq; Type: SEQUENCE; Schema: courses_schema; Owner: postgres
--

CREATE SEQUENCE courses_schema.program_practices_program_practice_id_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;

ALTER SEQUENCE courses_schema.program_practices_program_practice_id_seq OWNER TO postgres;

--
-- TOC entry 5136 (class 0 OID 0)
-- Dependencies: 250
-- Name: program_practices_program_practice_id_seq; Type: SEQUENCE OWNED BY; Schema: courses_schema; Owner: postgres
--

```

```

ALTER SEQUENCE courses_schema.program_practices_program_practice_id_seq OWNED BY
courses_schema.program_practices.program_practice_id;

--
-- TOC entry 219 (class 1259 OID 21202)
-- Name: programs; Type: TABLE; Schema: courses_schema; Owner: postgres
--

CREATE TABLE courses_schema.programs (
    program_id integer NOT NULL,
    program_name character varying(100) NOT NULL,
    program_type character varying(24) NOT NULL,
    duration_hours smallint NOT NULL,
    document_type character varying(14) NOT NULL,
    implementation_format character varying(10) NOT NULL,
    qualification character varying(40),
    price integer,
    CONSTRAINT programs_document_type_check CHECK (((document_type)::text = ANY ((ARRAY['сертификат'::character varying,
'удостоверение'::character varying, 'диплом'::character varying])::text[]))),
    CONSTRAINT programs_duration_hours_check CHECK ((duration_hours > 0)),
    CONSTRAINT programs_implementation_format_check CHECK (((implementation_format)::text = ANY ((ARRAY['онлайн'::character
varying, 'очно'::character varying, 'смешанный'::character varying])::text[]))),
    CONSTRAINT programs_program_type_check CHECK (((program_type)::text = ANY ((ARRAY['с нуля'::character varying,
'повышение квалификации'::character varying, 'профпереподготовка'::character varying, 'интенсив'::character varying])::text[])))
);

ALTER TABLE courses_schema.programs OWNER TO postgres;

--
-- TOC entry 5137 (class 0 OID 0)
-- Dependencies: 219
-- Name: CONSTRAINT programs_document_type_check ON programs; Type: COMMENT; Schema: courses_schema; Owner: postgres
--

COMMENT ON CONSTRAINT programs_document_type_check ON courses_schema.programs IS 'выбор из списка ("сертификат",
"удостоверение", "диплом");

--
-- TOC entry 5138 (class 0 OID 0)
-- Dependencies: 219
-- Name: CONSTRAINT programs_duration_hours_check ON programs; Type: COMMENT; Schema: courses_schema; Owner: postgres
--

COMMENT ON CONSTRAINT programs_duration_hours_check ON courses_schema.programs IS 'часы программы > 0';

--
-- TOC entry 5139 (class 0 OID 0)
-- Dependencies: 219
-- Name: CONSTRAINT programs_implementation_format_check ON programs; Type: COMMENT; Schema: courses_schema; Owner:
postgres
--

COMMENT ON CONSTRAINT programs_implementation_format_check ON courses_schema.programs IS 'выбор из списка ("онлайн",
"очно", "смешанный");

--
-- TOC entry 5140 (class 0 OID 0)
-- Dependencies: 219
-- Name: CONSTRAINT programs_program_type_check ON programs; Type: COMMENT; Schema: courses_schema; Owner: postgres
--

COMMENT ON CONSTRAINT programs_program_type_check ON courses_schema.programs IS 'выбор из списка "с нуля",
"повышение квалификации",
"профпереподготовка",
"интенсив";

--
-- TOC entry 218 (class 1259 OID 21201)

```



```

-- Name: programs_program_id_seq; Type: SEQUENCE; Schema: courses_schema; Owner: postgres
--

CREATE SEQUENCE courses_schema.programs_program_id_seq
  AS integer
  START WITH 1
  INCREMENT BY 1
  NO MINVALUE
  NO MAXVALUE
  CACHE 1;

ALTER SEQUENCE courses_schema.programs_program_id_seq OWNER TO postgres;

--
-- TOC entry 5141 (class 0 OID 0)
-- Dependencies: 218
-- Name: programs_program_id_seq; Type: SEQUENCE OWNED BY; Schema: courses_schema; Owner: postgres
--

ALTER SEQUENCE courses_schema.programs_program_id_seq OWNED BY courses_schema.programs.program_id;

--
-- TOC entry 243 (class 1259 OID 21365)
-- Name: schedules; Type: TABLE; Schema: courses_schema; Owner: postgres
--

CREATE TABLE courses_schema.schedules (
  schedule_id integer NOT NULL,
  group_id integer NOT NULL,
  discipline_id integer NOT NULL,
  teacher_id integer NOT NULL,
  classroom_id integer NOT NULL,
  class_date date NOT NULL,
  class_number character(1) NOT NULL,
  class_type character varying(20) NOT NULL,
  is_completed boolean DEFAULT false NOT NULL,
  CONSTRAINT schedules_class_type_check CHECK (((class_type)::text = ANY ((ARRAY['lecture'::character varying, 'lab'::character
varying, 'practice'::character varying])::text[])))
);

ALTER TABLE courses_schema.schedules OWNER TO postgres;

--
-- TOC entry 242 (class 1259 OID 21364)
-- Name: schedules_schedule_id_seq; Type: SEQUENCE; Schema: courses_schema; Owner: postgres
--

CREATE SEQUENCE courses_schema.schedules_schedule_id_seq
  AS integer
  START WITH 1
  INCREMENT BY 1
  NO MINVALUE
  NO MAXVALUE
  CACHE 1;

ALTER SEQUENCE courses_schema.schedules_schedule_id_seq OWNER TO postgres;

--
-- TOC entry 5142 (class 0 OID 0)
-- Dependencies: 242
-- Name: schedules_schedule_id_seq; Type: SEQUENCE OWNED BY; Schema: courses_schema; Owner: postgres
--

ALTER SEQUENCE courses_schema.schedules_schedule_id_seq OWNED BY courses_schema.schedules.schedule_id;

--
-- TOC entry 233 (class 1259 OID 21297)
-- Name: student_practices; Type: TABLE; Schema: courses_schema; Owner: postgres
--

```

```
CREATE TABLE courses_schema.student_practices (
    student_practice_id integer NOT NULL,
    current_student_id integer NOT NULL
);
```

```
ALTER TABLE courses_schema.student_practices OWNER TO postgres;
```

```
--
-- TOC entry 232 (class 1259 OID 21296)
-- Name: student_practices_student_practice_id_seq; Type: SEQUENCE; Schema: courses_schema; Owner: postgres
--
```

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

```
ALTER SEQUENCE courses_schema.student_practices_student_practice_id_seq OWNER TO postgres;
```

```
--
-- TOC entry 5143 (class 0 OID 0)
-- Dependencies: 232
-- Name: student_practices_student_practice_id_seq; Type: SEQUENCE OWNED BY; Schema: courses_schema; Owner: postgres
--
```

```
ALTER SEQUENCE courses_schema.student_practices_student_practice_id_seq OWNED BY
courses_schema.student_practices.student_practice_id;
```

```
--
-- TOC entry 217 (class 1259 OID 21189)
-- Name: students; Type: TABLE; Schema: courses_schema; Owner: postgres
--
```

```
CREATE TABLE courses_schema.students (
    student_id integer NOT NULL,
    last_name character varying(40) NOT NULL,
    first_middle_name character varying(50) NOT NULL,
    passport_number character(11) NOT NULL,
    phone_num character(16) NOT NULL,
    CONSTRAINT students_first_middle_name_check CHECK (((first_middle_name)::text ~ '^[A-Za-zA-Яa-яЁё ]+$'::text)),
    CONSTRAINT students_last_name_check CHECK (((last_name)::text ~ '^[A-Za-zA-Яa-яЁё ]+$'::text)),
    CONSTRAINT students_passport_number_check CHECK ((passport_number ~ '^\\d{4} \\d{6}$'::text)),
    CONSTRAINT students_phone_num_check CHECK ((phone_num ~ '^\\+7-\\d{3}-\\d{3}-\\d{2}-\\d{2}$'::text))
);
```

```
ALTER TABLE courses_schema.students OWNER TO postgres;
```

```
--
-- TOC entry 216 (class 1259 OID 21188)
-- Name: students_student_id_seq; Type: SEQUENCE; Schema: courses_schema; Owner: postgres
--
```

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

```
ALTER SEQUENCE courses_schema.students_student_id_seq OWNER TO postgres;
```

```
--
-- TOC entry 5144 (class 0 OID 0)
-- Dependencies: 216
-- Name: students_student_id_seq; Type: SEQUENCE OWNED BY; Schema: courses_schema; Owner: postgres
--
```

```
ALTER SEQUENCE courses_schema.students_student_id_seq OWNED BY courses_schema.students.student_id;
```

```
--  
-- TOC entry 221 (class 1259 OID 21213)  
-- Name: study_groups; Type: TABLE; Schema: courses_schema; Owner: postgres  
--
```

```
CREATE TABLE courses_schema.study_groups (  
    group_id integer NOT NULL,  
    program_id integer NOT NULL,  
    group_number character varying(10) NOT NULL,  
    max_students integer NOT NULL,  
    start_date date NOT NULL,  
    end_date date NOT NULL,  
    CONSTRAINT study_groups_check CHECK ((end_date > start_date)),  
    CONSTRAINT study_groups_max_students_check CHECK ((max_students > 0))  
);
```

```
ALTER TABLE courses_schema.study_groups OWNER TO postgres;
```

```
--  
-- TOC entry 220 (class 1259 OID 21212)  
-- Name: study_groups_group_id_seq; Type: SEQUENCE; Schema: courses_schema; Owner: postgres  
--
```

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

```
ALTER SEQUENCE courses_schema.study_groups_group_id_seq OWNER TO postgres;
```

```
--  
-- TOC entry 5145 (class 0 OID 0)  
-- Dependencies: 220  
-- Name: study_groups_group_id_seq; Type: SEQUENCE OWNED BY; Schema: courses_schema; Owner: postgres  
--
```

```
ALTER SEQUENCE courses_schema.study_groups_group_id_seq OWNED BY courses_schema.study_groups.group_id;
```

```
--  
-- TOC entry 237 (class 1259 OID 21324)  
-- Name: teacher_disciplines; Type: TABLE; Schema: courses_schema; Owner: postgres  
--
```

```
CREATE TABLE courses_schema.teacher_disciplines (  
    teacher_discipline_id integer NOT NULL,  
    teacher_id integer NOT NULL,  
    discipline_id integer NOT NULL  
);
```

```
ALTER TABLE courses_schema.teacher_disciplines OWNER TO postgres;
```

```
--  
-- TOC entry 236 (class 1259 OID 21323)  
-- Name: teacher_disciplines_teacher_discipline_id_seq; Type: SEQUENCE; Schema: courses_schema; Owner: postgres  
--
```

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

```

ALTER SEQUENCE courses_schema.teacher_disciplines_teacher_discipline_id_seq OWNER TO postgres;

--
-- TOC entry 5146 (class 0 OID 0)
-- Dependencies: 236
-- Name: teacher_disciplines_teacher_discipline_id_seq; Type: SEQUENCE OWNED BY; Schema: courses_schema; Owner: postgres
--

ALTER SEQUENCE courses_schema.teacher_disciplines_teacher_discipline_id_seq OWNED BY
courses_schema.teacher_disciplines.teacher_discipline_id;

--
-- TOC entry 235 (class 1259 OID 21316)
-- Name: teachers; Type: TABLE; Schema: courses_schema; Owner: postgres
--

CREATE TABLE courses_schema.teachers (
    teacher_id integer NOT NULL,
    last_name character varying(30) NOT NULL,
    first_name character varying(40) NOT NULL,
    position_ character varying(80) NOT NULL,
    phone_num character(16) NOT NULL,
    CONSTRAINT teachers_phone_num_check CHECK ((phone_num ~ '^\\+7-\\d{3}-\\d{3}-\\d{2}-\\d{2}$'::text))
);

ALTER TABLE courses_schema.teachers OWNER TO postgres;

--
-- TOC entry 234 (class 1259 OID 21315)
-- Name: teachers_teacher_id_seq; Type: SEQUENCE; Schema: courses_schema; Owner: postgres
--

CREATE SEQUENCE courses_schema.teachers_teacher_id_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;

ALTER SEQUENCE courses_schema.teachers_teacher_id_seq OWNER TO postgres;

--
-- TOC entry 5147 (class 0 OID 0)
-- Dependencies: 234
-- Name: teachers_teacher_id_seq; Type: SEQUENCE OWNED BY; Schema: courses_schema; Owner: postgres
--

ALTER SEQUENCE courses_schema.teachers_teacher_id_seq OWNED BY courses_schema.teachers.teacher_id;

--
-- TOC entry 4840 (class 2604 OID 21409)
-- Name: attendances attendance_id; Type: DEFAULT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.attendances ALTER COLUMN attendance_id SET DEFAULT
nextval('courses_schema.attendances_attendance_id_seq'::regclass);

--
-- TOC entry 4835 (class 2604 OID 21346)
-- Name: branches branch_id; Type: DEFAULT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.branches ALTER COLUMN branch_id SET DEFAULT
nextval('courses_schema.branches_branch_id_seq'::regclass);

--
-- TOC entry 4841 (class 2604 OID 21492)

```

```

-- Name: certifications certification_id; Type: DEFAULT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.certifications ALTER COLUMN certification_id SET DEFAULT
nextval('courses_schema.certifications_certification_id_seq'::regclass);

--
-- TOC entry 4839 (class 2604 OID 21397)
-- Name: change_requests change_id; Type: DEFAULT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.change_requests ALTER COLUMN change_id SET DEFAULT
nextval('courses_schema.change_requests_change_id_seq'::regclass);

--
-- TOC entry 4836 (class 2604 OID 21353)
-- Name: classrooms classroom_id; Type: DEFAULT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.classrooms ALTER COLUMN classroom_id SET DEFAULT
nextval('courses_schema.classrooms_classroom_id_seq'::regclass);

--
-- TOC entry 4824 (class 2604 OID 21232)
-- Name: current_students curr_student_id; Type: DEFAULT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.current_students ALTER COLUMN curr_student_id SET DEFAULT
nextval('courses_schema.current_students_curr_student_id_seq'::regclass);

--
-- TOC entry 4826 (class 2604 OID 21262)
-- Name: disciplines discipline_id; Type: DEFAULT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.disciplines ALTER COLUMN discipline_id SET DEFAULT
nextval('courses_schema.disciplines_discipline_id_seq'::regclass);

--
-- TOC entry 4825 (class 2604 OID 21250)
-- Name: documents document_id; Type: DEFAULT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.documents ALTER COLUMN document_id SET DEFAULT
nextval('courses_schema.documents_document_id_seq'::regclass);

--
-- TOC entry 4831 (class 2604 OID 21292)
-- Name: practices practice_id; Type: DEFAULT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.practices ALTER COLUMN practice_id SET DEFAULT
nextval('courses_schema.practices_practice_id_seq'::regclass);

--
-- TOC entry 4830 (class 2604 OID 21273)
-- Name: program_disciplines program_discipline_id; Type: DEFAULT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.program_disciplines ALTER COLUMN program_discipline_id SET DEFAULT
nextval('courses_schema.program_disciplines_program_discipline_id_seq'::regclass);

--
-- TOC entry 4842 (class 2604 OID 22348)
-- Name: program_practices program_practice_id; Type: DEFAULT; Schema: courses_schema; Owner: postgres
--

```

```

ALTER TABLE ONLY courses_schema.program_practices ALTER COLUMN program_practice_id SET DEFAULT
nextval('courses_schema.program_practices_program_practice_id_seq'::regclass);

--
-- TOC entry 4822 (class 2604 OID 21205)
-- Name: programs program_id; Type: DEFAULT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.programs ALTER COLUMN program_id SET DEFAULT
nextval('courses_schema.programs_program_id_seq'::regclass);

--
-- TOC entry 4837 (class 2604 OID 21368)
-- Name: schedules schedule_id; Type: DEFAULT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.schedules ALTER COLUMN schedule_id SET DEFAULT
nextval('courses_schema.schedules_schedule_id_seq'::regclass);

--
-- TOC entry 4832 (class 2604 OID 21300)
-- Name: student_practices student_practice_id; Type: DEFAULT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.student_practices ALTER COLUMN student_practice_id SET DEFAULT
nextval('courses_schema.student_practices_student_practice_id_seq'::regclass);

--
-- TOC entry 4821 (class 2604 OID 21192)
-- Name: students student_id; Type: DEFAULT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.students ALTER COLUMN student_id SET DEFAULT
nextval('courses_schema.students_student_id_seq'::regclass);

--
-- TOC entry 4823 (class 2604 OID 21216)
-- Name: study_groups group_id; Type: DEFAULT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.study_groups ALTER COLUMN group_id SET DEFAULT
nextval('courses_schema.study_groups_group_id_seq'::regclass);

--
-- TOC entry 4834 (class 2604 OID 21327)
-- Name: teacher_disciplines teacher_discipline_id; Type: DEFAULT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.teacher_disciplines ALTER COLUMN teacher_discipline_id SET DEFAULT
nextval('courses_schema.teacher_disciplines_teacher_discipline_id_seq'::regclass);

--
-- TOC entry 4833 (class 2604 OID 21319)
-- Name: teachers teacher_id; Type: DEFAULT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.teachers ALTER COLUMN teacher_id SET DEFAULT
nextval('courses_schema.teachers_teacher_id_seq'::regclass);

--
-- TOC entry 5115 (class 0 OID 21406)
-- Dependencies: 247
-- Data for Name: attendances; Type: TABLE DATA; Schema: courses_schema; Owner: postgres
--

INSERT INTO courses_schema.attendances VALUES (1, 1, 1, true, NULL);
INSERT INTO courses_schema.attendances VALUES (2, 1, 2, false, 'valid');

```

```

INSERT INTO courses_schema.attendances VALUES (3, 2, 1, true, NULL);
INSERT INTO courses_schema.attendances VALUES (4, 2, 2, true, NULL);
INSERT INTO courses_schema.attendances VALUES (5, 3, 1, false, 'invalid');
INSERT INTO courses_schema.attendances VALUES (6, 5, 4, true, NULL);
INSERT INTO courses_schema.attendances VALUES (7, 1, 6, true, NULL);
INSERT INTO courses_schema.attendances VALUES (8, 1, 7, false, 'valid');
INSERT INTO courses_schema.attendances VALUES (9, 2, 8, true, NULL);
INSERT INTO courses_schema.attendances VALUES (10, 2, 9, true, NULL);
INSERT INTO courses_schema.attendances VALUES (11, 3, 10, false, 'invalid');
INSERT INTO courses_schema.attendances VALUES (12, 5, 12, true, NULL);
INSERT INTO courses_schema.attendances VALUES (13, 6, 14, false, 'valid');
INSERT INTO courses_schema.attendances VALUES (14, 7, 18, true, NULL);
INSERT INTO courses_schema.attendances VALUES (15, 1, 26, true, NULL);
INSERT INTO courses_schema.attendances VALUES (16, 1, 27, false, 'valid');
INSERT INTO courses_schema.attendances VALUES (17, 2, 28, true, NULL);
INSERT INTO courses_schema.attendances VALUES (18, 3, 29, false, 'invalid');
INSERT INTO courses_schema.attendances VALUES (19, 5, 30, true, NULL);
INSERT INTO courses_schema.attendances VALUES (20, 6, 32, true, NULL);
INSERT INTO courses_schema.attendances VALUES (21, 7, 34, false, 'valid');
INSERT INTO courses_schema.attendances VALUES (22, 8, 36, true, NULL);
INSERT INTO courses_schema.attendances VALUES (23, 8, 37, false, 'valid');
INSERT INTO courses_schema.attendances VALUES (24, 9, 38, true, NULL);
INSERT INTO courses_schema.attendances VALUES (25, 10, 39, true, NULL);
INSERT INTO courses_schema.attendances VALUES (26, 11, 42, false, 'invalid');
INSERT INTO courses_schema.attendances VALUES (27, 12, 44, true, NULL);
INSERT INTO courses_schema.attendances VALUES (28, 1, 46, true, NULL);
INSERT INTO courses_schema.attendances VALUES (29, 2, 46, false, 'valid');
INSERT INTO courses_schema.attendances VALUES (30, 3, 47, true, NULL);
INSERT INTO courses_schema.attendances VALUES (31, 5, 48, false, NULL);
INSERT INTO courses_schema.attendances VALUES (32, 7, 50, true, NULL);
INSERT INTO courses_schema.attendances VALUES (33, 3, 48, false, 'valid');
INSERT INTO courses_schema.attendances VALUES (34, 4, 48, true, NULL);
INSERT INTO courses_schema.attendances VALUES (35, 5, 50, true, NULL);
INSERT INTO courses_schema.attendances VALUES (36, 6, 52, false, 'invalid');
INSERT INTO courses_schema.attendances VALUES (37, 7, 54, true, NULL);
INSERT INTO courses_schema.attendances VALUES (38, 8, 56, true, NULL);
INSERT INTO courses_schema.attendances VALUES (39, 9, 58, false, 'valid');
INSERT INTO courses_schema.attendances VALUES (40, 10, 60, true, NULL);
INSERT INTO courses_schema.attendances VALUES (41, 11, 62, true, NULL);
INSERT INTO courses_schema.attendances VALUES (42, 12, 64, false, 'valid');

```

```

--
-- TOC entry 5107 (class 0 OID 21343)
-- Dependencies: 239
-- Data for Name: branches; Type: TABLE DATA; Schema: courses_schema; Owner: postgres
--

```

```

INSERT INTO courses_schema.branches VALUES (1, 'ул. Ленина, 10, Москва', 'Центральный филиал');
INSERT INTO courses_schema.branches VALUES (2, 'пр. Науки, 5, Санкт-Петербург', 'Северный филиал');
INSERT INTO courses_schema.branches VALUES (3, 'ул. Школьная, 15, Казань', 'Казанский филиал');
INSERT INTO courses_schema.branches VALUES (4, 'ул. Центральная, 25, Новосибирск', 'Сибирский филиал');

```

```

--
-- TOC entry 5117 (class 0 OID 21489)
-- Dependencies: 249
-- Data for Name: certifications; Type: TABLE DATA; Schema: courses_schema; Owner: postgres
--

```

```

INSERT INTO courses_schema.certifications VALUES (1, 1, 2, 1, NULL, '2023-12-10', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (2, 3, 5, 4, NULL, '2023-12-15', 1, 'exam', 'отлично');
INSERT INTO courses_schema.certifications VALUES (3, 2, 7, NULL, 1, '2023-10-10', 1, 'differentiated_test', 'хорошо');
INSERT INTO courses_schema.certifications VALUES (4, 1, 1, 2, NULL, '2023-12-20', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (5, 1, 6, 1, NULL, '2023-12-12', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (6, 3, 8, 4, NULL, '2023-12-18', 1, 'exam', 'хорошо');
INSERT INTO courses_schema.certifications VALUES (7, 2, 10, NULL, 1, '2023-10-15', 1, 'differentiated_test', 'удовлетворительно');
INSERT INTO courses_schema.certifications VALUES (8, 1, 14, 2, NULL, '2023-12-22', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (9, 1, 26, 1, NULL, '2023-12-14', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (10, 2, 28, 3, NULL, '2023-11-28', 1, 'exam', 'хорошо');
INSERT INTO courses_schema.certifications VALUES (11, 3, 30, NULL, 1, '2023-12-05', 1, 'differentiated_test', 'отлично');
INSERT INTO courses_schema.certifications VALUES (12, 4, 32, 7, NULL, '2023-12-19', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (13, 5, 36, 8, NULL, '2024-03-10', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (14, 6, 38, 9, NULL, '2024-04-15', 1, 'exam', 'хорошо');
INSERT INTO courses_schema.certifications VALUES (15, 5, 42, 11, NULL, '2024-04-28', 1, 'test', 'зачтено');

```

```

INSERT INTO courses_schema.certifications VALUES (16, 6, 44, 12, NULL, '2024-06-20', 1, 'exam', 'отлично');
INSERT INTO courses_schema.certifications VALUES (17, 1, 46, 1, NULL, '2023-12-15', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (18, 2, 48, 3, NULL, '2023-11-30', 1, 'exam', 'хорошо');
INSERT INTO courses_schema.certifications VALUES (19, 3, 50, NULL, 1, '2023-12-10', 1, 'differentiated_test', 'хорошо');
INSERT INTO courses_schema.certifications VALUES (20, 6, 53, 10, NULL, '2024-06-20', 1, 'exam', 'отлично');
INSERT INTO courses_schema.certifications VALUES (21, 6, 54, 12, NULL, '2024-07-05', 1, 'exam', 'отлично');
INSERT INTO courses_schema.certifications VALUES (22, 1, 46, 1, NULL, '2023-12-18', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (23, 1, 48, 2, NULL, '2024-01-20', 1, 'exam', 'хорошо');
INSERT INTO courses_schema.certifications VALUES (24, 2, 50, 3, NULL, '2023-12-05', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (25, 3, 52, 4, NULL, '2024-03-01', 1, 'exam', 'удовлетворительно');
INSERT INTO courses_schema.certifications VALUES (26, 4, 54, 7, NULL, '2023-12-22', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (27, 5, 56, 8, NULL, '2024-03-15', 1, 'exam', 'отлично');
INSERT INTO courses_schema.certifications VALUES (28, 6, 58, 9, NULL, '2024-05-10', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (29, 6, 60, 10, NULL, '2024-06-25', 1, 'exam', 'хорошо');
INSERT INTO courses_schema.certifications VALUES (30, 5, 62, 11, NULL, '2024-05-05', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (31, 6, 64, 12, NULL, '2024-07-10', 1, 'exam', 'отлично');
INSERT INTO courses_schema.certifications VALUES (32, 1, 1, 1, NULL, '2023-10-15', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (33, 1, 2, 1, NULL, '2023-10-15', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (34, 1, 6, 1, NULL, '2023-10-15', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (35, 1, 7, 1, NULL, '2023-10-15', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (36, 1, 21, 1, NULL, '2023-10-15', 1, 'test', 'незачтено');
INSERT INTO courses_schema.certifications VALUES (37, 1, 21, 1, NULL, '2023-10-22', 2, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (38, 3, 5, 4, NULL, '2024-02-20', 1, 'exam', 'хорошо');
INSERT INTO courses_schema.certifications VALUES (39, 3, 12, 4, NULL, '2024-02-20', 1, 'exam', 'отлично');
INSERT INTO courses_schema.certifications VALUES (40, 3, 14, 4, NULL, '2024-02-20', 1, 'exam', 'неудовлетворительно');
INSERT INTO courses_schema.certifications VALUES (41, 3, 14, 4, NULL, '2024-03-05', 2, 'exam', 'удовлетворительно');
INSERT INTO courses_schema.certifications VALUES (42, 2, 3, 3, NULL, '2023-11-30', 1, 'differentiated_test', 'хорошо');
INSERT INTO courses_schema.certifications VALUES (43, 2, 10, 3, NULL, '2023-11-30', 1, 'differentiated_test', 'отлично');
INSERT INTO courses_schema.certifications VALUES (44, 4, 2, NULL, 1, '2023-12-10', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (45, 4, 6, NULL, 1, '2023-12-10', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (46, 5, 5, NULL, 2, '2023-12-15', 1, 'test', 'незачтено');
INSERT INTO courses_schema.certifications VALUES (47, 5, 5, NULL, 2, '2023-12-22', 2, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (48, 1, 36, 1, NULL, '2023-12-18', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (49, 2, 38, 3, NULL, '2023-11-25', 1, 'differentiated_test', 'удовлетворительно');
INSERT INTO courses_schema.certifications VALUES (50, 4, 46, NULL, 1, '2023-12-20', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (51, 5, 48, NULL, 2, '2024-01-15', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (52, 6, 50, NULL, 1, '2023-12-15', 1, 'test', 'незачтено');
INSERT INTO courses_schema.certifications VALUES (53, 6, 50, NULL, 1, '2023-12-22', 2, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (54, 3, 52, 4, NULL, '2024-02-25', 1, 'exam', 'неудовлетворительно');
INSERT INTO courses_schema.certifications VALUES (55, 3, 52, 4, NULL, '2024-03-10', 2, 'exam', 'удовлетворительно');
INSERT INTO courses_schema.certifications VALUES (56, 2, 54, 3, NULL, '2023-12-10', 1, 'differentiated_test', 'хорошо');
INSERT INTO courses_schema.certifications VALUES (57, 5, 56, NULL, 2, '2024-02-20', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (58, 6, 58, NULL, 1, '2024-03-15', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (59, 3, 60, 4, NULL, '2024-06-20', 1, 'exam', 'отлично');
INSERT INTO courses_schema.certifications VALUES (60, 5, 62, NULL, 1, '2024-05-01', 1, 'test', 'зачтено');
INSERT INTO courses_schema.certifications VALUES (61, 6, 64, NULL, 2, '2024-06-30', 1, 'test', 'незачтено');
INSERT INTO courses_schema.certifications VALUES (62, 6, 64, NULL, 2, '2024-07-07', 2, 'test', 'зачтено');

```

```

--
-- TOC entry 5113 (class 0 OID 21394)
-- Dependencies: 245
-- Data for Name: change_requests; Type: TABLE DATA; Schema: courses_schema; Owner: postgres
--

```

```

INSERT INTO courses_schema.change_requests VALUES (1, 4, 'Перенос занятия с 03.10 на 05.10 из-за болезни преподавателя');
INSERT INTO courses_schema.change_requests VALUES (2, 6, 'Замена аудитории с 301 на 302');
INSERT INTO courses_schema.change_requests VALUES (3, 8, 'Перенос занятия с 16.01 на 17.01 из-за технических работ');
INSERT INTO courses_schema.change_requests VALUES (4, 10, 'Замена преподавателя на занятии 22.01');

```

```

--
-- TOC entry 5109 (class 0 OID 21350)
-- Dependencies: 241
-- Data for Name: classrooms; Type: TABLE DATA; Schema: courses_schema; Owner: postgres
--

```

```

INSERT INTO courses_schema.classrooms VALUES (1, 1, '101', 'lecture', NULL);
INSERT INTO courses_schema.classrooms VALUES (2, 1, '102', 'lab', NULL);
INSERT INTO courses_schema.classrooms VALUES (3, 1, '103', 'practice', NULL);
INSERT INTO courses_schema.classrooms VALUES (4, 2, '201', 'lecture', NULL);
INSERT INTO courses_schema.classrooms VALUES (5, 2, '202', 'lab', NULL);
INSERT INTO courses_schema.classrooms VALUES (6, 3, '301', 'lecture', NULL);
INSERT INTO courses_schema.classrooms VALUES (7, 3, '302', 'practice', NULL);
INSERT INTO courses_schema.classrooms VALUES (8, 4, '401', 'lecture', NULL);

```



```

INSERT INTO courses_schema.classrooms VALUES (9, 4, '402', 'lab', NULL);
INSERT INTO courses_schema.classrooms VALUES (10, 4, '403', 'practice', NULL);
INSERT INTO courses_schema.classrooms VALUES (11, 4, '444', 'lab', 0);

```

```

--
-- TOC entry 5091 (class 0 OID 21229)
-- Dependencies: 223
-- Data for Name: current_students; Type: TABLE DATA; Schema: courses_schema; Owner: postgres
--

```

```

INSERT INTO courses_schema.current_students VALUES (1, 1, 1, '2023-09-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (2, 2, 1, '2023-09-01', 'выпускник', NULL);
INSERT INTO courses_schema.current_students VALUES (3, 3, 2, '2023-10-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (4, 4, 3, '2023-09-15', 'академический_отпуск', NULL);
INSERT INTO courses_schema.current_students VALUES (5, 5, 4, '2023-10-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (6, 1, 5, '2023-11-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (7, 2, 3, '2023-09-15', 'отчислен', NULL);
INSERT INTO courses_schema.current_students VALUES (8, 6, 1, '2023-09-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (9, 7, 1, '2023-09-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (10, 8, 2, '2023-10-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (11, 9, 2, '2023-10-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (12, 10, 3, '2023-09-15', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (13, 11, 3, '2023-09-15', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (14, 12, 4, '2023-10-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (15, 13, 4, '2023-10-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (16, 14, 5, '2023-11-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (17, 15, 5, '2023-11-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (18, 16, 1, '2023-09-01', 'отчислен', NULL);
INSERT INTO courses_schema.current_students VALUES (19, 17, 2, '2023-10-01', 'академический_отпуск', NULL);
INSERT INTO courses_schema.current_students VALUES (20, 18, 3, '2023-09-15', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (21, 19, 4, '2023-10-01', 'выпускник', NULL);
INSERT INTO courses_schema.current_students VALUES (22, 20, 5, '2023-11-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (23, 21, 1, '2023-09-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (24, 22, 2, '2023-10-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (25, 23, 3, '2023-09-15', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (26, 24, 4, '2023-10-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (27, 25, 5, '2023-11-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (28, 26, 1, '2023-09-05', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (29, 27, 2, '2023-10-03', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (30, 28, 3, '2023-09-18', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (31, 29, 4, '2023-10-07', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (32, 30, 5, '2023-11-05', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (33, 31, 1, '2023-09-10', 'академический_отпуск', NULL);
INSERT INTO courses_schema.current_students VALUES (34, 32, 2, '2023-10-05', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (35, 33, 3, '2023-09-20', 'отчислен', NULL);
INSERT INTO courses_schema.current_students VALUES (36, 34, 4, '2023-10-10', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (37, 35, 5, '2023-11-08', 'выпускник', NULL);
INSERT INTO courses_schema.current_students VALUES (38, 1, 6, '2024-01-15', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (39, 3, 6, '2024-01-15', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (40, 5, 7, '2024-02-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (41, 7, 7, '2024-02-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (42, 9, 8, '2024-01-20', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (43, 11, 9, '2024-03-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (44, 13, 10, '2024-04-01', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (45, 36, 1, '2023-09-10', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (46, 37, 2, '2023-10-05', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (47, 38, 3, '2023-09-20', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (48, 39, 4, '2023-10-10', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (49, 40, 5, '2023-11-05', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (50, 41, 6, '2024-01-20', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (51, 42, 7, '2024-02-05', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (52, 43, 8, '2024-01-25', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (53, 44, 9, '2024-03-05', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (54, 45, 10, '2024-04-05', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (55, 46, 1, '2023-09-15', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (56, 47, 1, '2023-09-15', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (57, 48, 2, '2023-10-10', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (58, 49, 2, '2023-10-10', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (59, 50, 3, '2023-09-25', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (60, 51, 3, '2023-09-25', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (61, 52, 4, '2023-10-15', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (62, 53, 4, '2023-10-15', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (63, 54, 5, '2023-11-10', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (64, 55, 5, '2023-11-10', 'обучается', NULL);

```

```

INSERT INTO courses_schema.current_students VALUES (65, 56, 6, '2024-01-25', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (66, 57, 6, '2024-01-25', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (67, 58, 7, '2024-02-10', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (68, 59, 7, '2024-02-10', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (69, 60, 8, '2024-01-30', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (70, 61, 8, '2024-01-30', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (71, 62, 9, '2024-03-10', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (72, 63, 9, '2024-03-10', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (73, 64, 10, '2024-04-10', 'обучается', NULL);
INSERT INTO courses_schema.current_students VALUES (74, 65, 10, '2024-04-10', 'обучается', NULL);

```

```

--
-- TOC entry 5095 (class 0 OID 21259)
-- Dependencies: 227
-- Data for Name: disciplines; Type: TABLE DATA; Schema: courses_schema; Owner: postgres
--

```

```

INSERT INTO courses_schema.disciplines VALUES (1, 'HTML/CSS', 10, 20, 10, 40);
INSERT INTO courses_schema.disciplines VALUES (2, 'JavaScript', 15, 25, 20, 60);
INSERT INTO courses_schema.disciplines VALUES (3, 'Python для анализа данных', 20, 30, 10, 60);
INSERT INTO courses_schema.disciplines VALUES (4, 'Педагогика', 30, 20, 0, 50);
INSERT INTO courses_schema.disciplines VALUES (5, 'Методика преподавания', 25, 25, 0, 50);
INSERT INTO courses_schema.disciplines VALUES (6, 'Основы статистики', 15, 15, 10, 40);
INSERT INTO courses_schema.disciplines VALUES (7, 'Базы данных', 10, 15, 15, 40);
INSERT INTO courses_schema.disciplines VALUES (8, 'Основы SQL', 15, 25, 20, 60);
INSERT INTO courses_schema.disciplines VALUES (9, 'Adobe Photoshop', 10, 30, 10, 50);
INSERT INTO courses_schema.disciplines VALUES (10, 'Управление проектами', 20, 20, 0, 40);
INSERT INTO courses_schema.disciplines VALUES (11, 'Продвинутый JavaScript', 15, 25, 20, 60);
INSERT INTO courses_schema.disciplines VALUES (12, 'Нейронные сети', 25, 25, 20, 70);

```

```

--
-- TOC entry 5093 (class 0 OID 21247)
-- Dependencies: 225
-- Data for Name: documents; Type: TABLE DATA; Schema: courses_schema; Owner: postgres
--

```

```

INSERT INTO courses_schema.documents VALUES (1, 2, '2023-12-20', 'WEB-123', 'REG-2023-12-001');
INSERT INTO courses_schema.documents VALUES (2, 4, '2023-10-15', 'PED-456', 'REG-2023-10-002');
INSERT INTO courses_schema.documents VALUES (3, 7, '2023-10-01', 'DA-789', 'REG-2023-10-003');
INSERT INTO courses_schema.documents VALUES (4, 19, '2024-03-05', 'PED-789', 'REG-2024-03-004');
INSERT INTO courses_schema.documents VALUES (5, 16, '2023-10-10', 'WEB-456', 'REG-2023-10-005');
INSERT INTO courses_schema.documents VALUES (6, 14, '2023-12-15', 'PY-321', 'REG-2023-12-006');
INSERT INTO courses_schema.documents VALUES (7, 35, '2023-12-18', 'PY-654', 'REG-2023-12-007');
INSERT INTO courses_schema.documents VALUES (8, 33, '2023-10-25', 'DA-987', 'REG-2023-10-008');
INSERT INTO courses_schema.documents VALUES (9, 31, '2023-11-15', 'WEB-789', 'REG-2023-11-009');
INSERT INTO courses_schema.documents VALUES (10, 36, '2024-03-20', 'SQL-111', 'REG-2024-03-010');
INSERT INTO courses_schema.documents VALUES (11, 38, '2024-05-05', 'DES-222', 'REG-2024-05-011');
INSERT INTO courses_schema.documents VALUES (12, 40, '2024-06-25', 'MAN-333', 'REG-2024-06-012');
INSERT INTO courses_schema.documents VALUES (13, 42, '2024-05-10', 'JS-444', 'REG-2024-05-013');
INSERT INTO courses_schema.documents VALUES (14, 44, '2024-07-05', 'ML-555', 'REG-2024-07-014');
INSERT INTO courses_schema.documents VALUES (15, 46, '2023-12-20', 'WEB-999', 'REG-2023-12-015');
INSERT INTO courses_schema.documents VALUES (16, 48, '2023-11-30', 'DA-888', 'REG-2023-11-016');
INSERT INTO courses_schema.documents VALUES (17, 50, '2023-12-12', 'PY-777', 'REG-2023-12-017');
INSERT INTO courses_schema.documents VALUES (18, 53, '2024-06-30', 'MAN-666', 'REG-2024-06-018');
INSERT INTO courses_schema.documents VALUES (19, 54, '2024-07-10', 'ML-555', 'REG-2024-07-019');
INSERT INTO courses_schema.documents VALUES (20, 56, '2024-03-25', 'SQL-222', 'REG-2024-03-020');
INSERT INTO courses_schema.documents VALUES (21, 58, '2024-05-15', 'DES-333', 'REG-2024-05-021');
INSERT INTO courses_schema.documents VALUES (22, 60, '2024-07-01', 'MAN-444', 'REG-2024-07-022');
INSERT INTO courses_schema.documents VALUES (23, 62, '2024-05-15', 'JS-555', 'REG-2024-05-023');
INSERT INTO courses_schema.documents VALUES (24, 64, '2024-07-15', 'ML-666', 'REG-2024-07-024');

```

```

--
-- TOC entry 5099 (class 0 OID 21289)
-- Dependencies: 231
-- Data for Name: practices; Type: TABLE DATA; Schema: courses_schema; Owner: postgres
--

```

```

INSERT INTO courses_schema.practices VALUES (1, 'educational');
INSERT INTO courses_schema.practices VALUES (2, 'industrial');

```

```

--

```

```
-- TOC entry 5097 (class 0 OID 21270)
-- Dependencies: 229
-- Data for Name: program_disciplines; Type: TABLE DATA; Schema: courses_schema; Owner: postgres
--
```

```
INSERT INTO courses_schema.program_disciplines VALUES (1, 1, 1);
INSERT INTO courses_schema.program_disciplines VALUES (2, 1, 2);
INSERT INTO courses_schema.program_disciplines VALUES (3, 2, 3);
INSERT INTO courses_schema.program_disciplines VALUES (4, 2, 6);
INSERT INTO courses_schema.program_disciplines VALUES (5, 2, 7);
INSERT INTO courses_schema.program_disciplines VALUES (6, 3, 4);
INSERT INTO courses_schema.program_disciplines VALUES (7, 3, 5);
INSERT INTO courses_schema.program_disciplines VALUES (8, 4, 3);
INSERT INTO courses_schema.program_disciplines VALUES (9, 5, 8);
INSERT INTO courses_schema.program_disciplines VALUES (10, 6, 9);
INSERT INTO courses_schema.program_disciplines VALUES (11, 7, 10);
INSERT INTO courses_schema.program_disciplines VALUES (12, 8, 11);
INSERT INTO courses_schema.program_disciplines VALUES (13, 9, 12);
```

```
--
-- TOC entry 5119 (class 0 OID 22345)
-- Dependencies: 251
-- Data for Name: program_practices; Type: TABLE DATA; Schema: courses_schema; Owner: postgres
--
```

```
--
-- TOC entry 5087 (class 0 OID 21202)
-- Dependencies: 219
-- Data for Name: programs; Type: TABLE DATA; Schema: courses_schema; Owner: postgres
--
```

```
INSERT INTO courses_schema.programs VALUES (1, 'Веб-разработка с нуля', 'с нуля', 120, 'сертификат', 'онлайн',
'Frontend-разработчик', 25000);
INSERT INTO courses_schema.programs VALUES (2, 'Анализ данных', 'повышение квалификации', 72, 'удостоверение',
'смешанный', 'Data Analyst', 35000);
INSERT INTO courses_schema.programs VALUES (3, 'Педагогика высшей школы', 'профпереподготовка', 250, 'диплом', 'очно',
'Преподаватель высшей школы', 40000);
INSERT INTO courses_schema.programs VALUES (4, 'Интенсив по Python', 'интенсив', 40, 'сертификат', 'онлайн',
'Python-разработчик', 15000);
INSERT INTO courses_schema.programs VALUES (5, 'Основы SQL', 'с нуля', 60, 'сертификат', 'онлайн', 'SQL-разработчик', 18000);
INSERT INTO courses_schema.programs VALUES (6, 'Графический дизайн', 'повышение квалификации', 90, 'удостоверение',
'смешанный', 'Графический дизайнер', 32000);
INSERT INTO courses_schema.programs VALUES (7, 'Менеджмент в образовании', 'профпереподготовка', 300, 'диплом', 'очно',
'Менеджер образования', 45000);
INSERT INTO courses_schema.programs VALUES (8, 'Интенсив по JavaScript', 'интенсив', 48, 'сертификат', 'онлайн', 'Специалист по
JavaScript', 20000);
INSERT INTO courses_schema.programs VALUES (9, 'Машинное обучение', 'повышение квалификации', 120, 'удостоверение',
'смешанный', 'Data Scientist', 50000);
```

```
--
-- TOC entry 5111 (class 0 OID 21365)
-- Dependencies: 243
-- Data for Name: schedules; Type: TABLE DATA; Schema: courses_schema; Owner: postgres
--
```

```
INSERT INTO courses_schema.schedules VALUES (1, 1, 1, 1, 1, '2023-09-05', '1', 'lecture', true);
INSERT INTO courses_schema.schedules VALUES (2, 1, 1, 1, 2, '2023-09-07', '2', 'lab', true);
INSERT INTO courses_schema.schedules VALUES (3, 1, 2, 1, 1, '2023-09-12', '1', 'lecture', true);
INSERT INTO courses_schema.schedules VALUES (4, 2, 1, 1, 3, '2023-10-03', '1', 'practice', false);
INSERT INTO courses_schema.schedules VALUES (5, 3, 3, 2, 4, '2023-09-18', '2', 'lecture', true);
INSERT INTO courses_schema.schedules VALUES (6, 4, 4, 3, 6, '2023-10-05', '1', 'lecture', false);
INSERT INTO courses_schema.schedules VALUES (7, 5, 3, 2, 1, '2023-11-02', '3', 'lab', false);
INSERT INTO courses_schema.schedules VALUES (8, 6, 8, 5, 8, '2024-01-16', '1', 'lecture', false);
INSERT INTO courses_schema.schedules VALUES (9, 6, 8, 5, 9, '2024-01-18', '2', 'lab', false);
INSERT INTO courses_schema.schedules VALUES (10, 7, 9, 6, 8, '2024-02-02', '1', 'lecture', false);
INSERT INTO courses_schema.schedules VALUES (11, 8, 10, 6, 9, '2024-01-22', '1', 'practice', false);
INSERT INTO courses_schema.schedules VALUES (12, 9, 11, 5, 8, '2024-03-02', '1', 'lecture', false);
INSERT INTO courses_schema.schedules VALUES (13, 10, 12, 6, 9, '2024-04-02', '1', 'lab', false);
```

```
--
```

```
-- TOC entry 5101 (class 0 OID 21297)
-- Dependencies: 233
-- Data for Name: student_practices; Type: TABLE DATA; Schema: courses_schema; Owner: postgres
--
```

```
INSERT INTO courses_schema.student_practices VALUES (1, 2);
INSERT INTO courses_schema.student_practices VALUES (2, 5);
INSERT INTO courses_schema.student_practices VALUES (3, 7);
INSERT INTO courses_schema.student_practices VALUES (4, 6);
INSERT INTO courses_schema.student_practices VALUES (5, 8);
INSERT INTO courses_schema.student_practices VALUES (6, 10);
INSERT INTO courses_schema.student_practices VALUES (7, 12);
INSERT INTO courses_schema.student_practices VALUES (8, 14);
INSERT INTO courses_schema.student_practices VALUES (9, 18);
INSERT INTO courses_schema.student_practices VALUES (10, 20);
INSERT INTO courses_schema.student_practices VALUES (11, 26);
INSERT INTO courses_schema.student_practices VALUES (12, 28);
INSERT INTO courses_schema.student_practices VALUES (13, 30);
INSERT INTO courses_schema.student_practices VALUES (14, 32);
INSERT INTO courses_schema.student_practices VALUES (15, 34);
INSERT INTO courses_schema.student_practices VALUES (16, 36);
INSERT INTO courses_schema.student_practices VALUES (17, 37);
INSERT INTO courses_schema.student_practices VALUES (18, 38);
INSERT INTO courses_schema.student_practices VALUES (19, 39);
INSERT INTO courses_schema.student_practices VALUES (20, 40);
INSERT INTO courses_schema.student_practices VALUES (21, 42);
INSERT INTO courses_schema.student_practices VALUES (22, 44);
INSERT INTO courses_schema.student_practices VALUES (23, 46);
INSERT INTO courses_schema.student_practices VALUES (24, 48);
INSERT INTO courses_schema.student_practices VALUES (25, 50);
INSERT INTO courses_schema.student_practices VALUES (26, 52);
INSERT INTO courses_schema.student_practices VALUES (27, 54);
INSERT INTO courses_schema.student_practices VALUES (28, 56);
INSERT INTO courses_schema.student_practices VALUES (29, 58);
INSERT INTO courses_schema.student_practices VALUES (30, 60);
INSERT INTO courses_schema.student_practices VALUES (31, 62);
INSERT INTO courses_schema.student_practices VALUES (32, 64);
INSERT INTO courses_schema.student_practices VALUES (33, 38);
INSERT INTO courses_schema.student_practices VALUES (34, 43);
INSERT INTO courses_schema.student_practices VALUES (35, 45);
```

```
--
-- TOC entry 5085 (class 0 OID 21189)
-- Dependencies: 217
-- Data for Name: students; Type: TABLE DATA; Schema: courses_schema; Owner: postgres
--
```

```
INSERT INTO courses_schema.students VALUES (1, 'Иванов', 'Иван Иванович', '1234 567890', '+7-901-234-56-78');
INSERT INTO courses_schema.students VALUES (2, 'Петрова', 'Мария Сергеевна', '2345 678901', '+7-902-345-67-89');
INSERT INTO courses_schema.students VALUES (3, 'Сидоров', 'Алексей Петрович', '3456 789012', '+7-903-456-78-90');
INSERT INTO courses_schema.students VALUES (4, 'Кузнецова', 'Елена Владимировна', '4567 890123', '+7-904-567-89-01');
INSERT INTO courses_schema.students VALUES (5, 'Смирнов', 'Дмитрий Алексеевич', '5678 901234', '+7-905-678-90-12');
INSERT INTO courses_schema.students VALUES (6, 'Волков', 'Артем Сергеевич', '6789 012345', '+7-906-789-01-23');
INSERT INTO courses_schema.students VALUES (7, 'Захарова', 'Анна Михайловна', '7890 123456', '+7-907-890-12-34');
INSERT INTO courses_schema.students VALUES (8, 'Козлов', 'Павел Андреевич', '8901 234567', '+7-908-901-23-45');
INSERT INTO courses_schema.students VALUES (9, 'Орлова', 'Виктория Игоревна', '9012 345678', '+7-909-012-34-56');
INSERT INTO courses_schema.students VALUES (10, 'Белов', 'Александр Дмитриевич', '0123 456789', '+7-910-123-45-67');
INSERT INTO courses_schema.students VALUES (11, 'Григорьева', 'Евгения Олеговна', '1235 678901', '+7-911-234-56-78');
INSERT INTO courses_schema.students VALUES (12, 'Дмитриев', 'Максим Викторович', '2346 789012', '+7-912-345-67-89');
INSERT INTO courses_schema.students VALUES (13, 'Ефимова', 'Ксения Александровна', '3457 890123', '+7-913-456-78-90');
INSERT INTO courses_schema.students VALUES (14, 'Жуков', 'Роман Сергеевич', '4568 901234', '+7-914-567-89-01');
INSERT INTO courses_schema.students VALUES (15, 'Исаева', 'Ольга Владимировна', '5679 012345', '+7-915-678-90-12');
INSERT INTO courses_schema.students VALUES (16, 'Комаров', 'Андрей Николаевич', '6780 123456', '+7-916-789-01-23');
INSERT INTO courses_schema.students VALUES (17, 'Ларина', 'Татьяна Петровна', '7891 234567', '+7-917-890-12-34');
INSERT INTO courses_schema.students VALUES (18, 'Морозов', 'Илья Алексеевич', '8902 345678', '+7-918-901-23-45');
INSERT INTO courses_schema.students VALUES (19, 'Никитина', 'Юлия Сергеевна', '9013 456789', '+7-919-012-34-56');
INSERT INTO courses_schema.students VALUES (20, 'Осипов', 'Денис Владимирович', '0124 567890', '+7-920-123-45-67');
INSERT INTO courses_schema.students VALUES (21, 'Павлова', 'Алина Андреевна', '1236 789012', '+7-921-234-56-78');
INSERT INTO courses_schema.students VALUES (22, 'Романов', 'Глеб Игоревич', '2347 890123', '+7-922-345-67-89');
INSERT INTO courses_schema.students VALUES (23, 'Семенова', 'Валерия Дмитриевна', '3458 901234', '+7-923-456-78-90');
INSERT INTO courses_schema.students VALUES (24, 'Тарасов', 'Артур Олегович', '4569 012345', '+7-924-567-89-01');
INSERT INTO courses_schema.students VALUES (25, 'Устинова', 'Диана Максимовна', '5670 123456', '+7-925-678-90-12');
INSERT INTO courses_schema.students VALUES (26, 'Федоров', 'Игорь Викторович', '6781 234567', '+7-926-789-01-24');
INSERT INTO courses_schema.students VALUES (27, 'Герасимова', 'Наталья Сергеевна', '7892 345678', '+7-927-890-12-35');
```

```

INSERT INTO courses_schema.students VALUES (28, 'Данилов', 'Кирилл Андреевич', '8903 456789', '+7-928-901-23-46');
INSERT INTO courses_schema.students VALUES (29, 'Зайцева', 'Арина Олеговна', '9014 567890', '+7-929-012-34-57');
INSERT INTO courses_schema.students VALUES (30, 'Антонов', 'Артем Игоревич', '0125 678901', '+7-930-123-45-68');
INSERT INTO courses_schema.students VALUES (31, 'Борисова', 'Елизавета Дмитриевна', '1237 890123', '+7-931-234-56-79');
INSERT INTO courses_schema.students VALUES (32, 'Васильев', 'Григорий Петрович', '2348 901234', '+7-932-345-67-80');
INSERT INTO courses_schema.students VALUES (33, 'Максимова', 'Вероника Александровна', '3459 012345', '+7-933-456-78-91');
INSERT INTO courses_schema.students VALUES (34, 'Тимофеев', 'Станислав Олегович', '4560 123456', '+7-934-567-89-02');
INSERT INTO courses_schema.students VALUES (35, 'Яковлева', 'Ангелина Викторовна', '5671 234567', '+7-935-678-90-13');
INSERT INTO courses_schema.students VALUES (36, 'Абрамова', 'София Артемовна', '6782 345678', '+7-936-789-01-25');
INSERT INTO courses_schema.students VALUES (37, 'Баранов', 'Илья Денисович', '7893 456789', '+7-937-890-12-36');
INSERT INTO courses_schema.students VALUES (38, 'Воронова', 'Алиса Максимовна', '8904 567890', '+7-938-901-23-47');
INSERT INTO courses_schema.students VALUES (39, 'Гусев', 'Даниил Кириллович', '9015 678901', '+7-939-012-34-58');
INSERT INTO courses_schema.students VALUES (40, 'Дорофеева', 'Полина Андреевна', '0126 789012', '+7-940-123-45-69');
INSERT INTO courses_schema.students VALUES (41, 'Егоров', 'Тимофей Львович', '1238 901234', '+7-941-234-56-80');
INSERT INTO courses_schema.students VALUES (42, 'Жданова', 'Милана Артёмовна', '2349 012345', '+7-942-345-67-81');
INSERT INTO courses_schema.students VALUES (43, 'Зимин', 'Роман Викторович', '3450 123456', '+7-943-456-78-92');
INSERT INTO courses_schema.students VALUES (44, 'Ильина', 'Вероника Сергеевна', '4561 234567', '+7-944-567-89-03');
INSERT INTO courses_schema.students VALUES (45, 'Кузьмин', 'Арсений Павлович', '5672 345678', '+7-945-678-90-14');
INSERT INTO courses_schema.students VALUES (46, 'Соловьев', 'Максим Андреевич', '6783 456789', '+7-946-789-01-26');
INSERT INTO courses_schema.students VALUES (47, 'Михайлова', 'Анастасия Дмитриевна', '7894 567890', '+7-947-890-12-37');
INSERT INTO courses_schema.students VALUES (48, 'Кудрявцева', 'Евгения Игоревна', '8905 678901', '+7-948-901-23-48');
INSERT INTO courses_schema.students VALUES (49, 'Беляев', 'Артём Олегович', '9016 789012', '+7-949-012-34-59');
INSERT INTO courses_schema.students VALUES (50, 'Горбунова', 'Виктория Сергеевна', '0127 890123', '+7-950-123-45-70');
INSERT INTO courses_schema.students VALUES (51, 'Тихонов', 'Александр Владимирович', '1239 012345', '+7-951-234-56-81');
INSERT INTO courses_schema.students VALUES (52, 'Макарова', 'Дарья Павловна', '2340 123456', '+7-952-345-67-82');
INSERT INTO courses_schema.students VALUES (53, 'Суханов', 'Иван Алексеевич', '3451 234567', '+7-953-456-78-93');
INSERT INTO courses_schema.students VALUES (54, 'Филиппова', 'Кристина Андреевна', '4562 345678', '+7-954-567-89-04');
INSERT INTO courses_schema.students VALUES (55, 'Шестаков', 'Денис Викторович', '5673 456789', '+7-955-678-90-15');
INSERT INTO courses_schema.students VALUES (56, 'Алексеева', 'Арина Максимовна', '6784 567890', '+7-956-789-01-27');
INSERT INTO courses_schema.students VALUES (57, 'Громов', 'Никита Сергеевич', '7895 678901', '+7-957-890-12-38');
INSERT INTO courses_schema.students VALUES (58, 'Давыдова', 'Алина Артёмовна', '8906 789012', '+7-958-901-23-49');
INSERT INTO courses_schema.students VALUES (59, 'Ермаков', 'Михаил Денисович', '9017 890123', '+7-959-012-34-60');
INSERT INTO courses_schema.students VALUES (60, 'Королева', 'Софья Ильинична', '0128 901234', '+7-960-123-45-71');
INSERT INTO courses_schema.students VALUES (61, 'Лапин', 'Андрей Владимирович', '1230 123456', '+7-961-234-56-82');
INSERT INTO courses_schema.students VALUES (62, 'Медведева', 'Екатерина Олеговна', '2341 234567', '+7-962-345-67-83');
INSERT INTO courses_schema.students VALUES (63, 'Носов', 'Роман Андреевич', '3452 345678', '+7-963-456-78-94');
INSERT INTO courses_schema.students VALUES (64, 'Петухова', 'Валерия Сергеевна', '4563 456789', '+7-964-567-89-05');
INSERT INTO courses_schema.students VALUES (65, 'Рыбаков', 'Алексей Дмитриевич', '5674 567890', '+7-965-678-90-16');

```

```

--
-- TOC entry 5089 (class 0 OID 21213)
-- Dependencies: 221
-- Data for Name: study_groups; Type: TABLE DATA; Schema: courses_schema; Owner: postgres
--

```

```

INSERT INTO courses_schema.study_groups VALUES (1, 1, 'WEB-01', 15, '2023-09-01', '2023-12-15');
INSERT INTO courses_schema.study_groups VALUES (2, 1, 'WEB-02', 15, '2023-10-01', '2024-01-15');
INSERT INTO courses_schema.study_groups VALUES (3, 2, 'DA-01', 10, '2023-09-15', '2023-11-30');
INSERT INTO courses_schema.study_groups VALUES (4, 3, 'PED-01', 20, '2023-10-01', '2024-03-01');
INSERT INTO courses_schema.study_groups VALUES (5, 4, 'PY-01', 25, '2023-11-01', '2023-12-10');
INSERT INTO courses_schema.study_groups VALUES (6, 5, 'SQL-01', 12, '2024-01-15', '2024-03-15');
INSERT INTO courses_schema.study_groups VALUES (7, 6, 'DES-01', 15, '2024-02-01', '2024-05-01');
INSERT INTO courses_schema.study_groups VALUES (8, 7, 'MAN-01', 18, '2024-01-20', '2024-06-20');
INSERT INTO courses_schema.study_groups VALUES (9, 8, 'JS-01', 20, '2024-03-01', '2024-05-01');
INSERT INTO courses_schema.study_groups VALUES (10, 9, 'ML-01', 10, '2024-04-01', '2024-07-01');

```

```

--
-- TOC entry 5105 (class 0 OID 21324)
-- Dependencies: 237
-- Data for Name: teacher_disciplines; Type: TABLE DATA; Schema: courses_schema; Owner: postgres
--

```

```

INSERT INTO courses_schema.teacher_disciplines VALUES (1, 1, 1);
INSERT INTO courses_schema.teacher_disciplines VALUES (2, 1, 2);
INSERT INTO courses_schema.teacher_disciplines VALUES (3, 2, 3);
INSERT INTO courses_schema.teacher_disciplines VALUES (4, 2, 6);
INSERT INTO courses_schema.teacher_disciplines VALUES (5, 3, 4);
INSERT INTO courses_schema.teacher_disciplines VALUES (6, 3, 5);
INSERT INTO courses_schema.teacher_disciplines VALUES (7, 4, 7);
INSERT INTO courses_schema.teacher_disciplines VALUES (8, 5, 8);
INSERT INTO courses_schema.teacher_disciplines VALUES (9, 5, 11);
INSERT INTO courses_schema.teacher_disciplines VALUES (10, 6, 9);
INSERT INTO courses_schema.teacher_disciplines VALUES (11, 6, 10);

```

```

--
-- TOC entry 5103 (class 0 OID 21316)
-- Dependencies: 235
-- Data for Name: teachers; Type: TABLE DATA; Schema: courses_schema; Owner: postgres
--

INSERT INTO courses_schema.teachers VALUES (1, 'Соколов', 'Андрей Викторович', 'Старший преподаватель', '+7-911-111-11-11');
INSERT INTO courses_schema.teachers VALUES (2, 'Федорова', 'Ольга Ивановна', 'Доцент', '+7-922-222-22-22');
INSERT INTO courses_schema.teachers VALUES (3, 'Лебедев', 'Михаил Сергеевич', 'Профессор', '+7-933-333-33-33');
INSERT INTO courses_schema.teachers VALUES (4, 'Ковалева', 'Екатерина Петровна', 'Преподаватель', '+7-944-444-44-44');
INSERT INTO courses_schema.teachers VALUES (5, 'Новиков', 'Артем Сергеевич', 'Преподаватель-практик', '+7-955-555-55-55');
INSERT INTO courses_schema.teachers VALUES (6, 'Полякова', 'Анна Владимировна', 'Доцент', '+7-966-666-66-66');

--
-- TOC entry 5148 (class 0 OID 0)
-- Dependencies: 246
-- Name: attendances_attendance_id_seq; Type: SEQUENCE SET; Schema: courses_schema; Owner: postgres
--

SELECT pg_catalog.setval('courses_schema.attendances_attendance_id_seq', 42, true);

--
-- TOC entry 5149 (class 0 OID 0)
-- Dependencies: 238
-- Name: branches_branch_id_seq; Type: SEQUENCE SET; Schema: courses_schema; Owner: postgres
--

SELECT pg_catalog.setval('courses_schema.branches_branch_id_seq', 4, true);

--
-- TOC entry 5150 (class 0 OID 0)
-- Dependencies: 248
-- Name: certifications_certification_id_seq; Type: SEQUENCE SET; Schema: courses_schema; Owner: postgres
--

SELECT pg_catalog.setval('courses_schema.certifications_certification_id_seq', 62, true);

--
-- TOC entry 5151 (class 0 OID 0)
-- Dependencies: 244
-- Name: change_requests_change_id_seq; Type: SEQUENCE SET; Schema: courses_schema; Owner: postgres
--

SELECT pg_catalog.setval('courses_schema.change_requests_change_id_seq', 4, true);

--
-- TOC entry 5152 (class 0 OID 0)
-- Dependencies: 240
-- Name: classrooms_classroom_id_seq; Type: SEQUENCE SET; Schema: courses_schema; Owner: postgres
--

SELECT pg_catalog.setval('courses_schema.classrooms_classroom_id_seq', 10, true);

--
-- TOC entry 5153 (class 0 OID 0)
-- Dependencies: 222
-- Name: current_students_curr_student_id_seq; Type: SEQUENCE SET; Schema: courses_schema; Owner: postgres
--

SELECT pg_catalog.setval('courses_schema.current_students_curr_student_id_seq', 74, true);

--
-- TOC entry 5154 (class 0 OID 0)
-- Dependencies: 226
-- Name: disciplines_discipline_id_seq; Type: SEQUENCE SET; Schema: courses_schema; Owner: postgres
--

```

```

SELECT pg_catalog.setval('courses_schema.disciplines_discipline_id_seq', 12, true);

--
-- TOC entry 5155 (class 0 OID 0)
-- Dependencies: 224
-- Name: documents_document_id_seq; Type: SEQUENCE SET; Schema: courses_schema; Owner: postgres
--

SELECT pg_catalog.setval('courses_schema.documents_document_id_seq', 24, true);

--
-- TOC entry 5156 (class 0 OID 0)
-- Dependencies: 230
-- Name: practices_practice_id_seq; Type: SEQUENCE SET; Schema: courses_schema; Owner: postgres
--

SELECT pg_catalog.setval('courses_schema.practices_practice_id_seq', 2, true);

--
-- TOC entry 5157 (class 0 OID 0)
-- Dependencies: 228
-- Name: program_disciplines_program_discipline_id_seq; Type: SEQUENCE SET; Schema: courses_schema; Owner: postgres
--

SELECT pg_catalog.setval('courses_schema.program_disciplines_program_discipline_id_seq', 13, true);

--
-- TOC entry 5158 (class 0 OID 0)
-- Dependencies: 250
-- Name: program_practices_program_practice_id_seq; Type: SEQUENCE SET; Schema: courses_schema; Owner: postgres
--

SELECT pg_catalog.setval('courses_schema.program_practices_program_practice_id_seq', 1, false);

--
-- TOC entry 5159 (class 0 OID 0)
-- Dependencies: 218
-- Name: programs_program_id_seq; Type: SEQUENCE SET; Schema: courses_schema; Owner: postgres
--

SELECT pg_catalog.setval('courses_schema.programs_program_id_seq', 9, true);

--
-- TOC entry 5160 (class 0 OID 0)
-- Dependencies: 242
-- Name: schedules_schedule_id_seq; Type: SEQUENCE SET; Schema: courses_schema; Owner: postgres
--

SELECT pg_catalog.setval('courses_schema.schedules_schedule_id_seq', 13, true);

--
-- TOC entry 5161 (class 0 OID 0)
-- Dependencies: 232
-- Name: student_practices_student_practice_id_seq; Type: SEQUENCE SET; Schema: courses_schema; Owner: postgres
--

SELECT pg_catalog.setval('courses_schema.student_practices_student_practice_id_seq', 35, true);

--
-- TOC entry 5162 (class 0 OID 0)
-- Dependencies: 216
-- Name: students_student_id_seq; Type: SEQUENCE SET; Schema: courses_schema; Owner: postgres
--

SELECT pg_catalog.setval('courses_schema.students_student_id_seq', 65, true);

```

```

--
-- TOC entry 5163 (class 0 OID 0)
-- Dependencies: 220
-- Name: study_groups_group_id_seq; Type: SEQUENCE SET; Schema: courses_schema; Owner: postgres
--

SELECT pg_catalog.setval('courses_schema.study_groups_group_id_seq', 10, true);

--
-- TOC entry 5164 (class 0 OID 0)
-- Dependencies: 236
-- Name: teacher_disciplines_teacher_discipline_id_seq; Type: SEQUENCE SET; Schema: courses_schema; Owner: postgres
--

SELECT pg_catalog.setval('courses_schema.teacher_disciplines_teacher_discipline_id_seq', 11, true);

--
-- TOC entry 5165 (class 0 OID 0)
-- Dependencies: 234
-- Name: teachers_teacher_id_seq; Type: SEQUENCE SET; Schema: courses_schema; Owner: postgres
--

SELECT pg_catalog.setval('courses_schema.teachers_teacher_id_seq', 6, true);

--
-- TOC entry 4907 (class 2606 OID 21412)
-- Name: attendances attendances_pkey; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.attendances
    ADD CONSTRAINT attendances_pkey PRIMARY KEY (attendance_id);

--
-- TOC entry 4909 (class 2606 OID 21414)
-- Name: attendances attendances_schedule_id_current_student_id_key; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.attendances
    ADD CONSTRAINT attendances_schedule_id_current_student_id_key UNIQUE (schedule_id, current_student_id);

--
-- TOC entry 4897 (class 2606 OID 21348)
-- Name: branches branches_pkey; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.branches
    ADD CONSTRAINT branches_pkey PRIMARY KEY (branch_id);

--
-- TOC entry 4911 (class 2606 OID 21501)
-- Name: certifications certifications_current_student_id_discipline_id_practice_id_key; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.certifications
    ADD CONSTRAINT certifications_current_student_id_discipline_id_practice_id_key UNIQUE (current_student_id, discipline_id, practice_id, attempt_number);

--
-- TOC entry 4913 (class 2606 OID 21499)
-- Name: certifications certifications_pkey; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.certifications
    ADD CONSTRAINT certifications_pkey PRIMARY KEY (certification_id);

```



```

--
-- TOC entry 4905 (class 2606 OID 21399)
-- Name: change_requests change_requests_pkey; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.change_requests
    ADD CONSTRAINT change_requests_pkey PRIMARY KEY (change_id);

--
-- TOC entry 4857 (class 2606 OID 22365)
-- Name: classrooms check_capacity; Type: CHECK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE courses_schema.classrooms
    ADD CONSTRAINT check_capacity CHECK ((capacity >= 0)) NOT VALID;

--
-- TOC entry 4899 (class 2606 OID 21358)
-- Name: classrooms classrooms_branch_id_room_number_key; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.classrooms
    ADD CONSTRAINT classrooms_branch_id_room_number_key UNIQUE (branch_id, room_number);

--
-- TOC entry 4901 (class 2606 OID 21356)
-- Name: classrooms classrooms_pkey; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.classrooms
    ADD CONSTRAINT classrooms_pkey PRIMARY KEY (classroom_id);

--
-- TOC entry 4877 (class 2606 OID 21235)
-- Name: current_students current_students_pkey; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.current_students
    ADD CONSTRAINT current_students_pkey PRIMARY KEY (curr_student_id);

--
-- TOC entry 4881 (class 2606 OID 21268)
-- Name: disciplines disciplines_pkey; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.disciplines
    ADD CONSTRAINT disciplines_pkey PRIMARY KEY (discipline_id);

--
-- TOC entry 4879 (class 2606 OID 21252)
-- Name: documents documents_pkey; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.documents
    ADD CONSTRAINT documents_pkey PRIMARY KEY (document_id);

--
-- TOC entry 4887 (class 2606 OID 21295)
-- Name: practices practices_pkey; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.practices
    ADD CONSTRAINT practices_pkey PRIMARY KEY (practice_id);

--
-- TOC entry 4883 (class 2606 OID 21275)

```

```

-- Name: program_disciplines program_disciplines_pkey; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.program_disciplines
  ADD CONSTRAINT program_disciplines_pkey PRIMARY KEY (program_discipline_id);

--

-- TOC entry 4885 (class 2606 OID 21277)
-- Name: program_disciplines program_disciplines_program_id_discipline_id_key; Type: CONSTRAINT; Schema: courses_schema;
Owner: postgres
--

ALTER TABLE ONLY courses_schema.program_disciplines
  ADD CONSTRAINT program_disciplines_program_id_discipline_id_key UNIQUE (program_id, discipline_id);

--

-- TOC entry 4915 (class 2606 OID 22350)
-- Name: program_practices program_practices_pkey; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.program_practices
  ADD CONSTRAINT program_practices_pkey PRIMARY KEY (program_practice_id);

--

-- TOC entry 4917 (class 2606 OID 22352)
-- Name: program_practices program_practices_program_id_practice_id_key; Type: CONSTRAINT; Schema: courses_schema; Owner:
postgres
--

ALTER TABLE ONLY courses_schema.program_practices
  ADD CONSTRAINT program_practices_program_id_practice_id_key UNIQUE (program_id, practice_id);

--

-- TOC entry 4871 (class 2606 OID 21211)
-- Name: programs programs_pkey; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.programs
  ADD CONSTRAINT programs_pkey PRIMARY KEY (program_id);

--

-- TOC entry 4903 (class 2606 OID 21372)
-- Name: schedules schedules_pkey; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.schedules
  ADD CONSTRAINT schedules_pkey PRIMARY KEY (schedule_id);

--

-- TOC entry 4889 (class 2606 OID 21302)
-- Name: student_practices student_practices_pkey; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.student_practices
  ADD CONSTRAINT student_practices_pkey PRIMARY KEY (student_practice_id);

--

-- TOC entry 4867 (class 2606 OID 21200)
-- Name: students students_passport_number_key; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.students
  ADD CONSTRAINT students_passport_number_key UNIQUE (passport_number);

--

-- TOC entry 4869 (class 2606 OID 21198)
-- Name: students students_pkey; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres

```

```

--

ALTER TABLE ONLY courses_schema.students
    ADD CONSTRAINT students_pkey PRIMARY KEY (student_id);

--

-- TOC entry 4873 (class 2606 OID 21220)
-- Name: study_groups study_groups_pkey; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.study_groups
    ADD CONSTRAINT study_groups_pkey PRIMARY KEY (group_id);

--

-- TOC entry 4893 (class 2606 OID 21329)
-- Name: teacher_disciplines teacher_disciplines_pkey; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.teacher_disciplines
    ADD CONSTRAINT teacher_disciplines_pkey PRIMARY KEY (teacher_discipline_id);

--

-- TOC entry 4895 (class 2606 OID 21331)
-- Name: teacher_disciplines teacher_disciplines_teacher_id_discipline_id_key; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.teacher_disciplines
    ADD CONSTRAINT teacher_disciplines_teacher_id_discipline_id_key UNIQUE (teacher_id, discipline_id);

--

-- TOC entry 4891 (class 2606 OID 21322)
-- Name: teachers teachers_pkey; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.teachers
    ADD CONSTRAINT teachers_pkey PRIMARY KEY (teacher_id);

--

-- TOC entry 4875 (class 2606 OID 21222)
-- Name: study_groups unique_program_group; Type: CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.study_groups
    ADD CONSTRAINT unique_program_group UNIQUE (program_id, group_number);

--

-- TOC entry 4933 (class 2606 OID 21420)
-- Name: attendances attendances_current_student_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.attendances
    ADD CONSTRAINT attendances_current_student_id_fkey FOREIGN KEY (current_student_id) REFERENCES
courses_schema.current_students(curr_student_id);

--

-- TOC entry 4934 (class 2606 OID 21415)
-- Name: attendances attendances_schedule_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.attendances
    ADD CONSTRAINT attendances_schedule_id_fkey FOREIGN KEY (schedule_id) REFERENCES
courses_schema.schedules(schedule_id);

--

-- TOC entry 4935 (class 2606 OID 21507)
-- Name: certifications certifications_current_student_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres

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--

ALTER TABLE ONLY courses_schema.certifications
  ADD CONSTRAINT certifications_current_student_id_fkey FOREIGN KEY (current_student_id) REFERENCES
courses_schema.current_students(curr_student_id);

--

-- TOC entry 4936 (class 2606 OID 21512)
-- Name: certifications certifications_discipline_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.certifications
  ADD CONSTRAINT certifications_discipline_id_fkey FOREIGN KEY (discipline_id) REFERENCES
courses_schema.disciplines(discipline_id);

--

-- TOC entry 4937 (class 2606 OID 21517)
-- Name: certifications certifications_practice_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.certifications
  ADD CONSTRAINT certifications_practice_id_fkey FOREIGN KEY (practice_id) REFERENCES
courses_schema.practices(practice_id);

--

-- TOC entry 4938 (class 2606 OID 21502)
-- Name: certifications certifications_teacher_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.certifications
  ADD CONSTRAINT certifications_teacher_id_fkey FOREIGN KEY (teacher_id) REFERENCES courses_schema.teachers(teacher_id);

--

-- TOC entry 4932 (class 2606 OID 21400)
-- Name: change_requests change_requests_schedule_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.change_requests
  ADD CONSTRAINT change_requests_schedule_id_fkey FOREIGN KEY (schedule_id) REFERENCES
courses_schema.schedules(schedule_id);

--

-- TOC entry 4927 (class 2606 OID 21359)
-- Name: classrooms classrooms_branch_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.classrooms
  ADD CONSTRAINT classrooms_branch_id_fkey FOREIGN KEY (branch_id) REFERENCES courses_schema.branches(branch_id);

--

-- TOC entry 4919 (class 2606 OID 21241)
-- Name: current_students current_students_group_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.current_students
  ADD CONSTRAINT current_students_group_id_fkey FOREIGN KEY (group_id) REFERENCES
courses_schema.study_groups(group_id);

--

-- TOC entry 4920 (class 2606 OID 21236)
-- Name: current_students current_students_student_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.current_students
  ADD CONSTRAINT current_students_student_id_fkey FOREIGN KEY (student_id) REFERENCES
courses_schema.students(student_id);

```

```

--
-- TOC entry 4921 (class 2606 OID 21253)
-- Name: documents documents_current_student_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.documents
  ADD CONSTRAINT documents_current_student_id_fkey FOREIGN KEY (current_student_id) REFERENCES
courses_schema.current_students(curr_student_id);

--
-- TOC entry 4922 (class 2606 OID 21283)
-- Name: program_disciplines program_disciplines_discipline_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner:
postgres
--

ALTER TABLE ONLY courses_schema.program_disciplines
  ADD CONSTRAINT program_disciplines_discipline_id_fkey FOREIGN KEY (discipline_id) REFERENCES
courses_schema.disciplines(discipline_id);

--
-- TOC entry 4923 (class 2606 OID 21278)
-- Name: program_disciplines program_disciplines_program_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner:
postgres
--

ALTER TABLE ONLY courses_schema.program_disciplines
  ADD CONSTRAINT program_disciplines_program_id_fkey FOREIGN KEY (program_id) REFERENCES
courses_schema.programs(program_id);

--
-- TOC entry 4939 (class 2606 OID 22358)
-- Name: program_practices program_practices_practice_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.program_practices
  ADD CONSTRAINT program_practices_practice_id_fkey FOREIGN KEY (practice_id) REFERENCES
courses_schema.practices(practice_id);

--
-- TOC entry 4940 (class 2606 OID 22353)
-- Name: program_practices program_practices_program_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.program_practices
  ADD CONSTRAINT program_practices_program_id_fkey FOREIGN KEY (program_id) REFERENCES
courses_schema.programs(program_id);

--
-- TOC entry 4928 (class 2606 OID 21388)
-- Name: schedules schedules_classroom_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.schedules
  ADD CONSTRAINT schedules_classroom_id_fkey FOREIGN KEY (classroom_id) REFERENCES
courses_schema.classrooms(classroom_id);

--
-- TOC entry 4929 (class 2606 OID 21378)
-- Name: schedules schedules_discipline_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.schedules
  ADD CONSTRAINT schedules_discipline_id_fkey FOREIGN KEY (discipline_id) REFERENCES
courses_schema.disciplines(discipline_id);

--
-- TOC entry 4930 (class 2606 OID 21373)
-- Name: schedules schedules_group_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres

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```

--

ALTER TABLE ONLY courses_schema.schedules
    ADD CONSTRAINT schedules_group_id_fkey FOREIGN KEY (group_id) REFERENCES courses_schema.study_groups(group_id);

--

-- TOC entry 4931 (class 2606 OID 21383)
-- Name: schedules schedules_teacher_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.schedules
    ADD CONSTRAINT schedules_teacher_id_fkey FOREIGN KEY (teacher_id) REFERENCES courses_schema.teachers(teacher_id);

--

-- TOC entry 4924 (class 2606 OID 21305)
-- Name: student_practices student_practices_current_student_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.student_practices
    ADD CONSTRAINT student_practices_current_student_id_fkey FOREIGN KEY (current_student_id) REFERENCES courses_schema.current_students(curr_student_id);

--

-- TOC entry 4918 (class 2606 OID 21223)
-- Name: study_groups study_groups_program_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.study_groups
    ADD CONSTRAINT study_groups_program_id_fkey FOREIGN KEY (program_id) REFERENCES courses_schema.programs(program_id);

--

-- TOC entry 4925 (class 2606 OID 21337)
-- Name: teacher_disciplines teacher_disciplines_discipline_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.teacher_disciplines
    ADD CONSTRAINT teacher_disciplines_discipline_id_fkey FOREIGN KEY (discipline_id) REFERENCES courses_schema.disciplines(discipline_id);

--

-- TOC entry 4926 (class 2606 OID 21332)
-- Name: teacher_disciplines teacher_disciplines_teacher_id_fkey; Type: FK CONSTRAINT; Schema: courses_schema; Owner: postgres
--

ALTER TABLE ONLY courses_schema.teacher_disciplines
    ADD CONSTRAINT teacher_disciplines_teacher_id_fkey FOREIGN KEY (teacher_id) REFERENCES courses_schema.teachers(teacher_id);

-- Completed on 2025-05-26 15:16:04

--
-- PostgreSQL database dump complete
--

```

ЗАКЛЮЧЕНИЕ

В ходе выполнения лабораторной работы была разработана и реализована база данных "Курсы" в PostgreSQL, отражающая предметную область организации внебюджетного образования.

В процессе работы создана структура из 17 взаимосвязанных таблиц, охватывающих все основные аспекты учебного процесса: от информации о студентах, преподавателях, учебных группах и дисциплинах до расписания занятий и аттестационных данных.

Модель базы данных была спроектирована с помощью инструментов pgAdmin 4, включая построение инфологической модели в нотации IDEF1X и генерацию логической модели (ERD).

Для обеспечения корректности и целостности данных в таблицах реализованы ограничения типов Primary Key и Foreign Key для связей между сущностями, Check — для валидации формата данных (например, телефона, паспорта, дат), а также Unique — для предотвращения дублирования записей.

Все таблицы были заполнены тестовыми данными, что позволило проверить работоспособность реализованной структуры, в том числе с учетом особенностей аттестации и повторных попыток сдачи.

В завершение были созданы резервные копии базы данных в форматах CUSTOM для полного восстановления и PLAIN для текстового представления в отчете, а также проведена проверка работоспособности базы данных с помощью выполнения SQL-запросов и анализа корректности внесенных данных.

Выводы:

Работа позволила закрепить навыки проектирования реляционных баз данных в PostgreSQL.

Успешно реализованы сложные ограничения (например, проверка на повторные попытки аттестации).

Созданная БД готова к использованию в учебном процессе и может быть расширена дополнительными функциями (например, автоматизация расписания, учет оплаты).

СПИСОК ИСПОЛЬЗОВАННЫХ ИСТОЧНИКОВ

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3. Документация PostgreSQL [Электронный ресурс] // Официальный сайт PostgreSQL. 1996-2025. URL: <https://www.postgresql.org/docs/13/index.html> (дата обращения: 11.02.2025).
4. Документация pgAdmin 4 PostgreSQL [Электронный ресурс] // Официальный сайт pgAdmin. URL: <https://www.pgadmin.org/docs/pgadmin4/latest/> (дата обращения: 11.02.2025)
- 5.