Министерство науки и высшего образования Российской Федерации
Федеральное государственное автономное образовательное
учреждение высшего образования
«НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ ИТМО»
Факультет инфокоммуникационных технологий

ОТЧЕТ
ПО ЛАБОРАТОРНОЙ РАБОТЕ № 1

по теме: Создание таблиц базы данных postgresql. Заполнение таблиц рабочими данными.
по дисциплине: Проектирование и реализация баз данных

Специальность:
09.03.03 Мобильные и сетевые технологии

Проверил:
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ЦЕЛЬ РАБОТЫ

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

ПРАКТИЧЕСКОЕ ЗАДАНИЕ

Оборудование: компьютерный класс.
Программное обеспечение: СУБД PostgreSQL 1X, pgAdmin 4.
Практическое задание:

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

Указание:
Создать две резервные копии:

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

7. Восстановить БД.

Вариант 2. БД «Сессия»

Описание предметной области: БД содержит сведения о сдаче сессии студентами. Номер зачетной книжки однозначно идентифицирует студента.

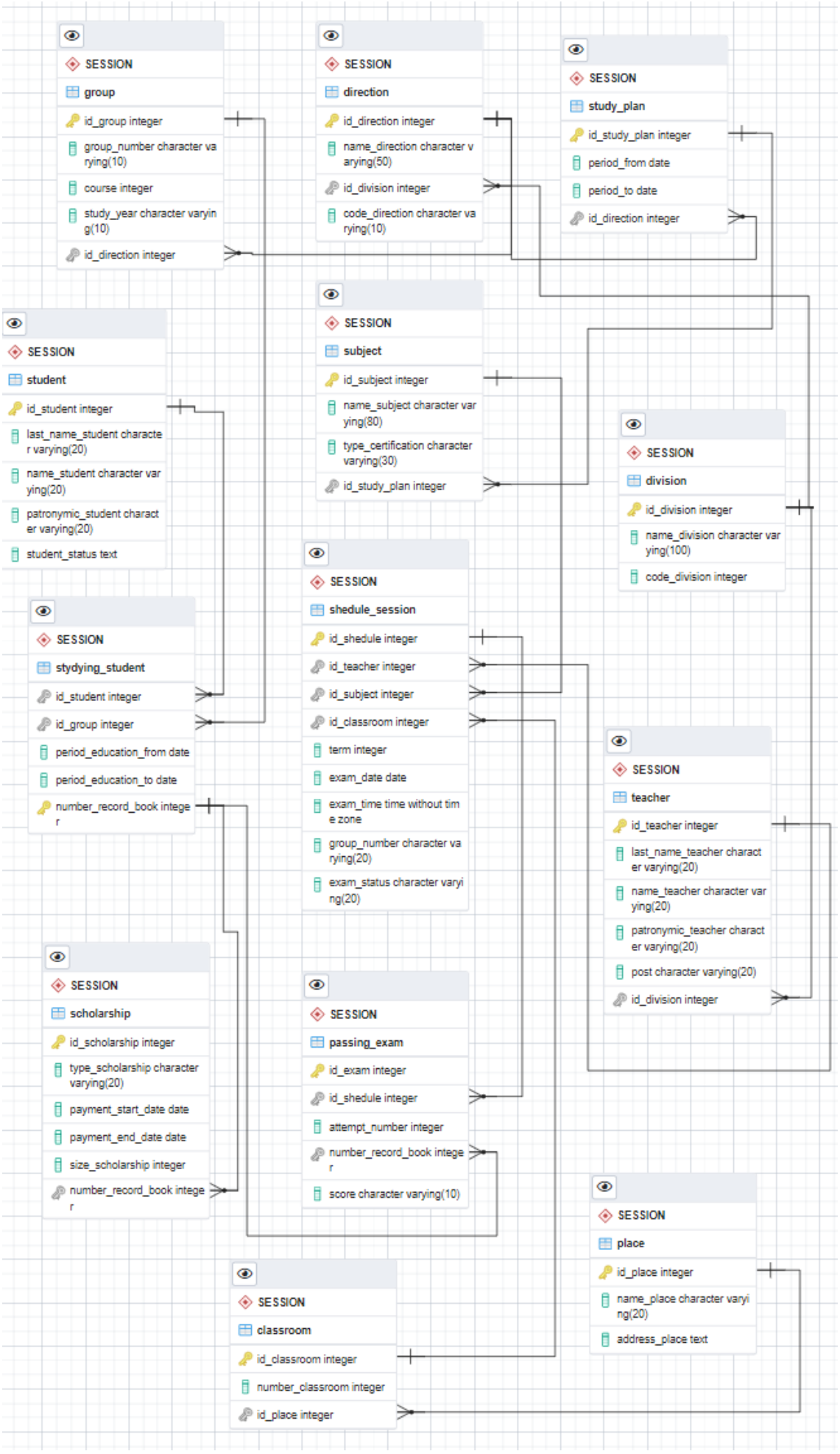
БД должна содержать следующий минимальный набор сведений: Номер зачетной книжки. Фамилия студента. Имя студента. Отчество студента. Курс. Группа. Учебный год. Семестр. Код дисциплины/практики. Название дисциплины/практики. Код направления. Название направления. Оценка. Фамилия преподавателя. Имя преподавателя. Отчество преподавателя. Должность. Код подразделения. Подразделение. Дата сдачи экзамена/зачета/дифзачета. Аудитория. Площадка (адрес). Номер попытки (максимально 3).

Дополните исходные данные информацией: по расписанию сессии, по назначению базовой и повышенной стипендии.

ХОД РАБОТЫ

1) Наименование БД:
Session

2) Схема логической модели:



3) Dump, содержащий скрипты работы с БД.

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

-- Dumped from database version 13.6
-- Dumped by pg_dump version 13.6

-- Started on 2022-03-30 21:47:06

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;
```

Создание базы данных

```
CREATE DATABASE "Session" WITH TEMPLATE = template0 ENCODING = 'UTF8'
LOCALE = 'Russian_Russia.1251';


ALTER DATABASE "Session" OWNER TO postgres;

\connect "Session"

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 5 (class 2615 OID 16897)
-- Name: SESSION; Type: SCHEMA; Schema: -; Owner: postgres
--
```

Создание схемы

```
CREATE SCHEMA "SESSION";
ALTER SCHEMA "SESSION" OWNER TO postgres;

SET default_tablespace = '';

SET default_table_access_method = heap;
```

Создание таблицы Classroom

```
--
-- TOC entry 203 (class 1259 OID 17004)
-- Name: classroom; Type: TABLE; Schema: SESSION; Owner: postgres
--
CREATE TABLE "SESSION".classroom (
    id_classroom integer NOT NULL,
    number_classroom integer NOT NULL,
    id_place integer NOT NULL
);


ALTER TABLE "SESSION".classroom OWNER TO postgres;

--
-- TOC entry 202 (class 1259 OID 17002)
-- Name: classroom_id_classroom_seq; Type: SEQUENCE; Schema: SESSION; Owner:
postgres
--

CREATE SEQUENCE "SESSION".classroom_id_classroom_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER TABLE "SESSION".classroom_id_classroom_seq OWNER TO postgres;

--
-- TOC entry 3150 (class 0 OID 0)
-- Dependencies: 202
-- Name: classroom_id_classroom_seq; Type: SEQUENCE OWNED BY; Schema:
SESSION; Owner: postgres
--

ALTER SEQUENCE "SESSION".classroom_id_classroom_seq OWNED BY
"SESSION".classroom.id_classroom;
```

Создание таблицы Direction

```
--
-- TOC entry 209 (class 1259 OID 17068)
-- Name: direction; Type: TABLE; Schema: SESSION; Owner: postgres
--

CREATE TABLE "SESSION".direction (
    id_direction integer NOT NULL,
    name_direction character varying(50),
    id_division integer NOT NULL,
    code_direction character varying(10) NOT NULL
);


ALTER TABLE "SESSION".direction OWNER TO postgres;

--
-- TOC entry 208 (class 1259 OID 17066)
-- Name: direction_id_direction_seq; Type: SEQUENCE; Schema: SESSION; Owner:
postgres
--

CREATE SEQUENCE "SESSION".direction_id_direction_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER TABLE "SESSION".direction_id_direction_seq OWNER TO postgres;

--
-- TOC entry 3151 (class 0 OID 0)
-- Dependencies: 208
-- Name: direction_id_direction_seq; Type: SEQUENCE OWNED BY; Schema: SESSION;
Owner: postgres
--

ALTER SEQUENCE "SESSION".direction_id_direction_seq OWNED BY
"SESSION".direction.id_direction;
```

Создание таблицы Division

```
--
-- TOC entry 207 (class 1259 OID 17060)
-- Name: division; Type: TABLE; Schema: SESSION; Owner: postgres
```

```
--

CREATE TABLE "SESSION".division (
    id_division integer NOT NULL,
    name_division character varying(100),
    code_division integer NOT NULL
);


ALTER TABLE "SESSION".division OWNER TO postgres;

--
-- TOC entry 206 (class 1259 OID 17058)
-- Name: division_id_division_seq; Type: SEQUENCE; Schema: SESSION; Owner: postgres
--

CREATE SEQUENCE "SESSION".division_id_division_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER TABLE "SESSION".division_id_division_seq OWNER TO postgres;

--
-- TOC entry 3152 (class 0 OID 0)
-- Dependencies: 206
-- Name: division_id_division_seq; Type: SEQUENCE OWNED BY; Schema: SESSION;
Owner: postgres
--

ALTER SEQUENCE "SESSION".division_id_division_seq OWNED BY
"SESSION".division.id_division;
```

Создание таблицы group

```
--
-- TOC entry 211 (class 1259 OID 17081)
-- Name: group; Type: TABLE; Schema: SESSION; Owner: postgres
--

CREATE TABLE "SESSION"."group" (
    id_group integer NOT NULL,
    group_number character varying(10) NOT NULL,
    course integer,
    study_year character varying(10),
```

```
    id_direction integer NOT NULL
);


ALTER TABLE "SESSION"."group" OWNER TO postgres;

--
-- TOC entry 210 (class 1259 OID 17079)
-- Name: group_id_group_seq; Type: SEQUENCE; Schema: SESSION; Owner: postgres
--

CREATE SEQUENCE "SESSION".group_id_group_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER TABLE "SESSION".group_id_group_seq OWNER TO postgres;

--
-- TOC entry 3153 (class 0 OID 0)
-- Dependencies: 210
-- Name: group_id_group_seq; Type: SEQUENCE OWNED BY; Schema: SESSION;
Owner: postgres
--

ALTER SEQUENCE "SESSION".group_id_group_seq OWNED BY
"SESSION"."group".id_group;
```

Создание таблицы passing_exam. Проверка числа попыток и оценки

```
--
-- TOC entry 225 (class 1259 OID 17197)
-- Name: passing_exam; Type: TABLE; Schema: SESSION; Owner: postgres
--

CREATE TABLE "SESSION".passing_exam (
    id_exam integer NOT NULL,
    id_shedule integer NOT NULL,
    attempt_number integer NOT NULL,
    number_record_book integer NOT NULL,
    score character varying(10) NOT NULL,
    CONSTRAINT attempt_number CHECK (((attempt_number >= 1) AND (attempt_number
<= 3))),
    CONSTRAINT score CHECK (((score)::text = ANY (ARRAY[('2'::character
varying)::text, ('3'::character varying)::text, ('4'::character varying)::text, ('5'::character
```

```
varying)::text, ('Зачёт'::character varying)::text, ('Незачёт'::character varying)::text])))
);


ALTER TABLE "SESSION".passing_exam OWNER TO postgres;

--
-- TOC entry 224 (class 1259 OID 17195)
-- Name: passing_exam_id_exam_seq; Type: SEQUENCE; Schema: SESSION; Owner: postgres
--

CREATE SEQUENCE "SESSION".passing_exam_id_exam_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER TABLE "SESSION".passing_exam_id_exam_seq OWNER TO postgres;

--
-- TOC entry 3154 (class 0 OID 0)
-- Dependencies: 224
-- Name: passing_exam_id_exam_seq; Type: SEQUENCE OWNED BY; Schema: SESSION; Owner: postgres
--

ALTER SEQUENCE "SESSION".passing_exam_id_exam_seq OWNED BY "SESSION".passing_exam.id_exam;
```

Создание таблицы place

```
--
-- TOC entry 201 (class 1259 OID 16993)
-- Name: place; Type: TABLE; Schema: SESSION; Owner: postgres
--

CREATE TABLE "SESSION".place (
    id_place integer NOT NULL,
    name_place character varying(20),
    address_place text NOT NULL
);

ALTER TABLE "SESSION".place OWNER TO postgres;

--
```

```
-- TOC entry 200 (class 1259 OID 16991)
-- Name: place_id_place_seq; Type: SEQUENCE; Schema: SESSION; Owner: postgres
--

CREATE SEQUENCE "SESSION".place_id_place_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER TABLE "SESSION".place_id_place_seq OWNER TO postgres;

--
-- TOC entry 3155 (class 0 OID 0)
-- Dependencies: 200
-- Name: place_id_place_seq; Type: SEQUENCE OWNED BY; Schema: SESSION; Owner:
postgres
--

ALTER SEQUENCE "SESSION".place_id_place_seq OWNED BY
"SESSION".place.id_place;
```

Создание таблицы scholarship. Проверка даты, размера и типа

```
--
-- TOC entry 215 (class 1259 OID 17115)
-- Name: scholarship; Type: TABLE; Schema: SESSION; Owner: postgres
--

CREATE TABLE "SESSION".scholarship (
    id_scholarship integer NOT NULL,
    type_scholarship character varying(20) NOT NULL,
    payment_start_date date NOT NULL,
    payment_end_date date NOT NULL,
    size_scholarship integer NOT NULL,
    number_record_book integer NOT NULL,
    CONSTRAINT check_date_pay CHECK ((payment_end_date >= payment_start_date)),
    CONSTRAINT check_size CHECK ((size_scholarship >= 0)),
    CONSTRAINT type CHECK (((type_scholarship)::text = ANY
(ARRAY[('Базовая'::character varying)::text, ('Повышенная'::character varying)::text,
('Социальная'::character varying)::text])))
);


ALTER TABLE "SESSION".scholarship OWNER TO postgres;
```

```
--
-- TOC entry 214 (class 1259 OID 17113)
-- Name: scholarship_id_scholarship_seq; Type: SEQUENCE; Schema: SESSION; Owner:
postgres
--

CREATE SEQUENCE "SESSION".scholarship_id_scholarship_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER TABLE "SESSION".scholarship_id_scholarship_seq OWNER TO postgres;

--
-- TOC entry 3156 (class 0 OID 0)
-- Dependencies: 214
-- Name: scholarship_id_scholarship_seq; Type: SEQUENCE OWNED BY; Schema:
SESSION; Owner: postgres
--

ALTER SEQUENCE "SESSION".scholarship_id_scholarship_seq OWNED BY
"SESSION".scholarship.id_scholarship;
```

Создание таблицы schedule_session. Проверка статуса экзамена

```
--
-- TOC entry 223 (class 1259 OID 17173)
-- Name: shedule_session; Type: TABLE; Schema: SESSION; Owner: postgres
--

CREATE TABLE "SESSION".shedule_session (
    id_shedule integer NOT NULL,
    id_teacher integer NOT NULL,
    id_subject integer NOT NULL,
    id_classroom integer NOT NULL,
    term integer NOT NULL,
    exam_date date NOT NULL,
    exam_time time without time zone NOT NULL,
    group_number character varying(20) NOT NULL,
    exam_status character varying(20) NOT NULL,
    CONSTRAINT status CHECK (((exam_status)::text = ANY
(ARRAY[('Запланирован'::character varying)::text, ('Проводится'::character varying)::text,
('Проведен'::character varying)::text, ('Отменен'::character varying)::text])))
);
```

```
ALTER TABLE "SESSION".shedule_session OWNER TO postgres;

--
-- TOC entry 222 (class 1259 OID 17171)
-- Name: shedule_session_id_shedule_seq; Type: SEQUENCE; Schema: SESSION; Owner:
postgres
--

CREATE SEQUENCE "SESSION".shedule_session_id_shedule_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER TABLE "SESSION".shedule_session_id_shedule_seq OWNER TO postgres;

--
-- TOC entry 3157 (class 0 OID 0)
-- Dependencies: 222
-- Name: shedule_session_id_shedule_seq; Type: SEQUENCE OWNED BY; Schema:
SESSION; Owner: postgres
--

ALTER SEQUENCE "SESSION".shedule_session_id_shedule_seq OWNED BY
"SESSION".shedule_session.id_shedule;
```

Создание таблицы student. Проверка статуса студента

```
--
-- TOC entry 205 (class 1259 OID 17018)
-- Name: student; Type: TABLE; Schema: SESSION; Owner: postgres
--

CREATE TABLE "SESSION".student (
    id_student integer NOT NULL,
    last_name_student character varying(20) NOT NULL,
    name_student character varying(20) NOT NULL,
    patronymic_student character varying(20),
    student_status text NOT NULL,
    CONSTRAINT status CHECK ((student_status = ANY (ARRAY['Обучается'::text,
'Отчислен'::text, 'В академ. отпуске'::text])))
);


ALTER TABLE "SESSION".student OWNER TO postgres;
```

```
--
-- TOC entry 204 (class 1259 OID 17016)
-- Name: student_id_student_seq; Type: SEQUENCE; Schema: SESSION; Owner: postgres
--

CREATE SEQUENCE "SESSION".student_id_student_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER TABLE "SESSION".student_id_student_seq OWNER TO postgres;

--
-- TOC entry 3158 (class 0 OID 0)
-- Dependencies: 204
-- Name: student_id_student_seq; Type: SEQUENCE OWNED BY; Schema: SESSION;
Owner: postgres
--

ALTER SEQUENCE "SESSION".student_id_student_seq OWNED BY
"SESSION".student.id_student;
```

Создание таблицы study_plan. Проверка дат

```
--
-- TOC entry 217 (class 1259 OID 17132)
-- Name: study_plan; Type: TABLE; Schema: SESSION; Owner: postgres
--

CREATE TABLE "SESSION".study_plan (
    id_study_plan integer NOT NULL,
    period_from date NOT NULL,
    period_to date NOT NULL,
    id_direction integer NOT NULL,
    CONSTRAINT check_date_plan CHECK ((period_to >= period_from))
);


ALTER TABLE "SESSION".study_plan OWNER TO postgres;

--
-- TOC entry 216 (class 1259 OID 17130)
-- Name: study_plan_id_study_plan_seq; Type: SEQUENCE; Schema: SESSION; Owner:
postgres
```

```
--

CREATE SEQUENCE "SESSION".study_plan_id_study_plan_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;


ALTER TABLE "SESSION".study_plan_id_study_plan_seq OWNER TO postgres;

--
-- TOC entry 3159 (class 0 OID 0)
-- Dependencies: 216
-- Name: study_plan_id_study_plan_seq; Type: SEQUENCE OWNED BY; Schema:
SESSION; Owner: postgres
--

ALTER SEQUENCE "SESSION".study_plan_id_study_plan_seq OWNED BY
"SESSION".study_plan.id_study_plan;
```

Создание таблицы stydying_student. Проверка дат

```
--
-- TOC entry 213 (class 1259 OID 17094)
-- Name: stydying_student; Type: TABLE; Schema: SESSION; Owner: postgres
--

CREATE TABLE "SESSION".stydying_student (
    id_student integer NOT NULL,
    id_group integer NOT NULL,
    period_education_from date NOT NULL,
    period_education_to date NOT NULL,
    number_record_book integer NOT NULL,
    CONSTRAINT check_date CHECK ((period_education_to >= period_education_from))
);


ALTER TABLE "SESSION".stydying_student OWNER TO postgres;

--
-- TOC entry 212 (class 1259 OID 17092)
-- Name: stydying_student_id_student_seq; Type: SEQUENCE; Schema: SESSION; Owner:
postgres
--

CREATE SEQUENCE "SESSION".stydying_student_id_student_seq
```

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


ALTER TABLE "SESSION".stydying_student_id_student_seq OWNER TO postgres;

--
-- TOC entry 3160 (class 0 OID 0)
-- Dependencies: 212
-- Name: stydying_student_id_student_seq; Type: SEQUENCE OWNED BY; Schema:
SESSION; Owner: postgres
--

ALTER SEQUENCE "SESSION".stydying_student_id_student_seq OWNED BY
"SESSION".stydying_student.id_student;
```

Создание таблицы subject. Проверка вида аттестации

```
--
-- TOC entry 219 (class 1259 OID 17146)
-- Name: subject; Type: TABLE; Schema: SESSION; Owner: postgres
--

CREATE TABLE "SESSION".subject (
    id_subject integer NOT NULL,
    name_subject character varying(80) NOT NULL,
    type_certification character varying(30) NOT NULL,
    id_study_plan integer NOT NULL,
    CONSTRAINT type CHECK (((type_certification)::text = ANY
(ARRAY[('Экзамен'::character varying)::text, ('Зачёт'::character varying)::text,
('Дифференцированный зачёт'::character varying)::text, ('Курсовая работа'::character
varying)::text])))
);


ALTER TABLE "SESSION".subject OWNER TO postgres;

--
-- TOC entry 218 (class 1259 OID 17144)
-- Name: subject_id_subject_seq; Type: SEQUENCE; Schema: SESSION; Owner: postgres
--

CREATE SEQUENCE "SESSION".subject_id_subject_seq
    AS integer
    START WITH 1
```

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


ALTER TABLE "SESSION".subject_id_subject_seq OWNER TO postgres;

--
-- TOC entry 3161 (class 0 OID 0)
-- Dependencies: 218
-- Name: subject_id_subject_seq; Type: SEQUENCE OWNED BY; Schema: SESSION;
Owner: postgres
--

ALTER SEQUENCE "SESSION".subject_id_subject_seq OWNED BY
"SESSION".subject.id_subject;
```

Создание таблицы teacher

```
--
-- TOC entry 221 (class 1259 OID 17160)
-- Name: teacher; Type: TABLE; Schema: SESSION; Owner: postgres
--

CREATE TABLE "SESSION".teacher (
    id_teacher integer NOT NULL,
    last_name_teacher character varying(20) NOT NULL,
    name_teacher character varying(20) NOT NULL,
    patronymic_teacher character varying(20),
    post character varying(20) NOT NULL,
    id_division integer NOT NULL
);


ALTER TABLE "SESSION".teacher OWNER TO postgres;

--
-- TOC entry 220 (class 1259 OID 17158)
-- Name: teacher_id_teacher_seq; Type: SEQUENCE; Schema: SESSION; Owner: postgres
--

CREATE SEQUENCE "SESSION".teacher_id_teacher_seq
    AS integer
    START WITH 1
    INCREMENT BY 1
    NO MINVALUE
    NO MAXVALUE
    CACHE 1;
```

```
ALTER TABLE "SESSION".teacher_id_teacher_seq OWNER TO postgres;

--
-- TOC entry 3162 (class 0 OID 0)
-- Dependencies: 220
-- Name: teacher_id_teacher_seq; Type: SEQUENCE OWNED BY; Schema: SESSION;
Owner: postgres
--

ALTER SEQUENCE "SESSION".teacher_id_teacher_seq OWNED BY
"SESSION".teacher.id_teacher;
```

Автоматические счётчики в качестве id

```
--
-- TOC entry 2925 (class 2604 OID 17007)
-- Name: classroom id_classroom; Type: DEFAULT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".classroom ALTER COLUMN id_classroom SET
DEFAULT nextval('"SESSION".classroom_id_classroom_seq'::regclass);


--
-- TOC entry 2929 (class 2604 OID 17071)
-- Name: direction id_direction; Type: DEFAULT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".direction ALTER COLUMN id_direction SET
DEFAULT nextval('"SESSION".direction_id_direction_seq'::regclass);


--
-- TOC entry 2928 (class 2604 OID 17063)
-- Name: division id_division; Type: DEFAULT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".division ALTER COLUMN id_division SET
DEFAULT nextval('"SESSION".division_id_division_seq'::regclass);


--
-- TOC entry 2930 (class 2604 OID 17084)
-- Name: group id_group; Type: DEFAULT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION"."group" ALTER COLUMN id_group SET DEFAULT
```

```
nextval('"SESSION".group_id_group_seq'::regclass);


--
-- TOC entry 2942 (class 2604 OID 17200)
-- Name: passing_exam id_exam; Type: DEFAULT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".passing_exam ALTER COLUMN id_exam SET
DEFAULT nextval('"SESSION".passing_exam_id_exam_seq'::regclass);


--
-- TOC entry 2924 (class 2604 OID 16996)
-- Name: place id_place; Type: DEFAULT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".place ALTER COLUMN id_place SET DEFAULT
nextval('"SESSION".place_id_place_seq'::regclass);


--
-- TOC entry 2932 (class 2604 OID 17118)
-- Name: scholarship id_scholarship; Type: DEFAULT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".scholarship ALTER COLUMN id_scholarship SET
DEFAULT nextval('"SESSION".scholarship_id_scholarship_seq'::regclass);


--
-- TOC entry 2940 (class 2604 OID 17176)
-- Name: shedule_session id_shedule; Type: DEFAULT; Schema: SESSION; Owner:
postgres
--

ALTER TABLE ONLY "SESSION".shedule_session ALTER COLUMN id_shedule SET
DEFAULT nextval('"SESSION".shedule_session_id_shedule_seq'::regclass);


--
-- TOC entry 2926 (class 2604 OID 17021)
-- Name: student id_student; Type: DEFAULT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".student ALTER COLUMN id_student SET DEFAULT
nextval('"SESSION".student_id_student_seq'::regclass);
```

```
--
-- TOC entry 2937 (class 2604 OID 17149)
-- Name: subject id_subject; Type: DEFAULT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".subject ALTER COLUMN id_subject SET DEFAULT
nextval('"SESSION".subject_id_subject_seq'::regclass);



--
-- TOC entry 2939 (class 2604 OID 17163)
-- Name: teacher id_teacher; Type: DEFAULT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".teacher ALTER COLUMN id_teacher SET DEFAULT
nextval('"SESSION".teacher_id_teacher_seq'::regclass);
```

Заполнение данными таблицы classroom

```
--
-- TOC entry 3121 (class 0 OID 17004)
-- Dependencies: 203
-- Data for Name: classroom; Type: TABLE DATA; Schema: SESSION; Owner: postgres
--

INSERT INTO "SESSION".classroom (id_classroom, number_classroom, id_place)
VALUES (1, 353, 3);
INSERT INTO "SESSION".classroom (id_classroom, number_classroom, id_place)
VALUES (2, 203, 3);
INSERT INTO "SESSION".classroom (id_classroom, number_classroom, id_place)
VALUES (3, 355, 3);
INSERT INTO "SESSION".classroom (id_classroom, number_classroom, id_place)
VALUES (4, 3408, 2);
INSERT INTO "SESSION".classroom (id_classroom, number_classroom, id_place)
VALUES (5, 1122, 2);
INSERT INTO "SESSION".classroom (id_classroom, number_classroom, id_place)
VALUES (6, 3302, 2);
INSERT INTO "SESSION".classroom (id_classroom, number_classroom, id_place)
VALUES (7, 203, 3);
INSERT INTO "SESSION".classroom (id_classroom, number_classroom, id_place)
VALUES (8, 103, 3);
INSERT INTO "SESSION".classroom (id_classroom, number_classroom, id_place)
VALUES (9, 2407, 1);
INSERT INTO "SESSION".classroom (id_classroom, number_classroom, id_place)
VALUES (10, 2326, 1);
INSERT INTO "SESSION".classroom (id_classroom, number_classroom, id_place)
VALUES (11, 350, 3);
INSERT INTO "SESSION".classroom (id_classroom, number_classroom, id_place)
```

VALUES (12, 3418, 2);
INSERT INTO "SESSION".classroom (id_classroom, number_classroom, id_place)
VALUES (13, 1212, 2);
INSERT INTO "SESSION".classroom (id_classroom, number_classroom, id_place)
VALUES (14, 3225, 2);
INSERT INTO "SESSION".classroom (id_classroom, number_classroom, id_place)
VALUES (15, 543, 3);
INSERT INTO "SESSION".classroom (id_classroom, number_classroom, id_place)
VALUES (16, 2408, 1);
INSERT INTO "SESSION".classroom (id_classroom, number_classroom, id_place)
VALUES (17, 2325, 1);

Заполнение данными таблицы direction

--
-- TOC entry 3127 (class 0 OID 17068)
-- Dependencies: 209
-- Data for Name: direction; Type: TABLE DATA; Schema: SESSION; Owner: postgres
--

INSERT INTO "SESSION".direction (id_direction, name_direction, id_division, code_direction) VALUES (1, 'Интеллектуальные системы в гуманитарной сфере', 3, '45.03.04');
INSERT INTO "SESSION".direction (id_direction, name_direction, id_division, code_direction) VALUES (2, 'Инфокоммуникационные технологии и системы связи', 3, '11.03.02');
INSERT INTO "SESSION".direction (id_direction, name_direction, id_division, code_direction) VALUES (3, 'Прикладная информатика', 3, '09.03.03');
INSERT INTO "SESSION".direction (id_direction, name_direction, id_division, code_direction) VALUES (4, 'Информационная безопасность', 5, '10.03.01');
INSERT INTO "SESSION".direction (id_direction, name_direction, id_division, code_direction) VALUES (5, 'Конструирование и технология электронных средств', 5, '11.03.03');

Заполнение данными таблицы division

--
-- TOC entry 3125 (class 0 OID 17060)
-- Dependencies: 207
-- Data for Name: division; Type: TABLE DATA; Schema: SESSION; Owner: postgres
--

INSERT INTO "SESSION".division (id_division, name_division, code_division) VALUES (1, 'мегафакультет трансляционных информационных технологий', 767);
INSERT INTO "SESSION".division (id_division, name_division, code_division) VALUES (2, 'факультет информационных технологий и программирования', 717);
INSERT INTO "SESSION".division (id_division, name_division, code_division) VALUES (3, 'факультет инфокоммуникационных технологий', 725);
INSERT INTO "SESSION".division (id_division, name_division, code_division) VALUES (4, 'мегафакультет компьютерных технологий и управления', 773);

INSERT INTO "SESSION".division (id_division, name_division, code_division) VALUES (5, 'факультет безопасности информационных технологий', 763);
INSERT INTO "SESSION".division (id_division, name_division, code_division) VALUES (6, 'физико-технический мегафакультет', 766);
INSERT INTO "SESSION".division (id_division, name_division, code_division) VALUES (7, 'мегафакультет биотехнологий и низкотемпературных систем', 770);
INSERT INTO "SESSION".division (id_division, name_division, code_division) VALUES (8, 'факультет систем управления и робототехники', 761);

Заполнение данными таблицы group

--
-- TOC entry 3129 (class 0 OID 17081)
-- Dependencies: 211
-- Data for Name: group; Type: TABLE DATA; Schema: SESSION; Owner: postgres
--

INSERT INTO "SESSION"."group" (id_group, group_number, course, study_year, id_direction) VALUES (1, 'K3240', 2, '2021/2022', 3);
INSERT INTO "SESSION"."group" (id_group, group_number, course, study_year, id_direction) VALUES (2, 'K3140', 1, '2021/2022', 3);
INSERT INTO "SESSION"."group" (id_group, group_number, course, study_year, id_direction) VALUES (3, 'N33481', 4, '2021/2022', 3);
INSERT INTO "SESSION"."group" (id_group, group_number, course, study_year, id_direction) VALUES (4, 'K3442', 4, '2020/2021', 1);
INSERT INTO "SESSION"."group" (id_group, group_number, course, study_year, id_direction) VALUES (7, 'K3143', 1, '2021/2022', 1);
INSERT INTO "SESSION"."group" (id_group, group_number, course, study_year, id_direction) VALUES (6, 'K3121', 1, '2021/2022', 2);
INSERT INTO "SESSION"."group" (id_group, group_number, course, study_year, id_direction) VALUES (5, 'K3220', 2, '2021/2022', 2);

Заполнение данными таблицы passing_exam

--
-- TOC entry 3143 (class 0 OID 17197)
-- Dependencies: 225
-- Data for Name: passing_exam; Type: TABLE DATA; Schema: SESSION; Owner: postgres
--

INSERT INTO "SESSION".passing_exam (id_exam, id_shedule, attempt_number, number_record_book, score) VALUES (1, 1, 1, 312310, 'Зачёт');
INSERT INTO "SESSION".passing_exam (id_exam, id_shedule, attempt_number, number_record_book, score) VALUES (2, 1, 1, 312407, 'Зачёт');
INSERT INTO "SESSION".passing_exam (id_exam, id_shedule, attempt_number, number_record_book, score) VALUES (3, 4, 1, 336100, 'Зачёт');
INSERT INTO "SESSION".passing_exam (id_exam, id_shedule, attempt_number, number_record_book, score) VALUES (4, 10, 1, 336100, '2');

INSERT INTO "SESSION".passing_exam (id_exam, id_shedule, attempt_number, number_record_book, score) VALUES (5, 10, 2, 336100, '4');
INSERT INTO "SESSION".passing_exam (id_exam, id_shedule, attempt_number, number_record_book, score) VALUES (6, 9, 1, 312310, '5');
INSERT INTO "SESSION".passing_exam (id_exam, id_shedule, attempt_number, number_record_book, score) VALUES (7, 9, 1, 312407, '5');
INSERT INTO "SESSION".passing_exam (id_exam, id_shedule, attempt_number, number_record_book, score) VALUES (8, 7, 1, 283128, '4');
INSERT INTO "SESSION".passing_exam (id_exam, id_shedule, attempt_number, number_record_book, score) VALUES (9, 8, 1, 283128, '3');
INSERT INTO "SESSION".passing_exam (id_exam, id_shedule, attempt_number, number_record_book, score) VALUES (10, 7, 1, 283129, '2');
INSERT INTO "SESSION".passing_exam (id_exam, id_shedule, attempt_number, number_record_book, score) VALUES (11, 7, 2, 283129, '2');
INSERT INTO "SESSION".passing_exam (id_exam, id_shedule, attempt_number, number_record_book, score) VALUES (12, 7, 3, 283129, '4');
INSERT INTO "SESSION".passing_exam (id_exam, id_shedule, attempt_number, number_record_book, score) VALUES (13, 8, 1, 283129, '3');
INSERT INTO "SESSION".passing_exam (id_exam, id_shedule, attempt_number, number_record_book, score) VALUES (14, 7, 1, 283991, '5');
INSERT INTO "SESSION".passing_exam (id_exam, id_shedule, attempt_number, number_record_book, score) VALUES (15, 8, 1, 283991, '5');

Заполнение данными таблицы place

--
-- TOC entry 3119 (class 0 OID 16993)
-- Dependencies: 201
-- Data for Name: place; Type: TABLE DATA; Schema: SESSION; Owner: postgres
--

INSERT INTO "SESSION".place (id_place, name_place, address_place) VALUES (1, 'Кронверкский', 'г. Санкт-Петербург, Кронверкский прспект, 49');
INSERT INTO "SESSION".place (id_place, name_place, address_place) VALUES (2, 'Ломоносова', 'г. Санкт-Петербург, ул. Ломоносова, 9');
INSERT INTO "SESSION".place (id_place, name_place, address_place) VALUES (3, 'Биржа', 'г. Санкт-Петербург, Биржевая линия, 14-16');

Заполнение данными таблицы scholarship

--
-- TOC entry 3133 (class 0 OID 17115)
-- Dependencies: 215
-- Data for Name: scholarship; Type: TABLE DATA; Schema: SESSION; Owner: postgres
--

INSERT INTO "SESSION".scholarship (id_scholarship, type_scholarship, payment_start_date, payment_end_date, size_scholarship, number_record_book) VALUES (1, 'Повышенная', '2022-02-01', '2022-06-30', 4100, 312310);
INSERT INTO "SESSION".scholarship (id_scholarship, type_scholarship,

payment_start_date, payment_end_date, size_scholarship, number_record_book) VALUES (2, 'Базовая', '2021-07-01', '2022-01-31', 2000, 312310);
INSERT INTO "SESSION".scholarship (id_scholarship, type_scholarship, payment_start_date, payment_end_date, size_scholarship, number_record_book) VALUES (3, 'Повышенная', '2022-02-01', '2022-06-30', 6000, 283128);
INSERT INTO "SESSION".scholarship (id_scholarship, type_scholarship, payment_start_date, payment_end_date, size_scholarship, number_record_book) VALUES (4, 'Повышенная', '2021-07-01', '2022-01-31', 10000, 336100);
INSERT INTO "SESSION".scholarship (id_scholarship, type_scholarship, payment_start_date, payment_end_date, size_scholarship, number_record_book) VALUES (5, 'Базовая', '2022-02-01', '2022-06-30', 2000, 336100);
INSERT INTO "SESSION".scholarship (id_scholarship, type_scholarship, payment_start_date, payment_end_date, size_scholarship, number_record_book) VALUES (6, 'Социальная', '2022-02-01', '2022-06-30', 3000, 283991);
INSERT INTO "SESSION".scholarship (id_scholarship, type_scholarship, payment_start_date, payment_end_date, size_scholarship, number_record_book) VALUES (7, 'Социальная', '2021-07-01', '2022-01-31', 3000, 283991);
INSERT INTO "SESSION".scholarship (id_scholarship, type_scholarship, payment_start_date, payment_end_date, size_scholarship, number_record_book) VALUES (8, 'Базовая', '2021-07-01', '2022-01-31', 2000, 336702);

Заполнение данными таблицы schedule_session

--
-- TOC entry 3141 (class 0 OID 17173)
-- Dependencies: 223
-- Data for Name: shedule_session; Type: TABLE DATA; Schema: SESSION; Owner: postgres
--

INSERT INTO "SESSION".shedule_session (id_shedule, id_teacher, id_subject, id_classroom, term, exam_date, exam_time, group_number, exam_status) VALUES (1, 1, 1, 3, 3, '2022-01-28', '10:00:00', 'К3240', 'Проведен');
INSERT INTO "SESSION".shedule_session (id_shedule, id_teacher, id_subject, id_classroom, term, exam_date, exam_time, group_number, exam_status) VALUES (2, 1, 2, 3, 4, '2022-06-20', '10:00:00', 'К3240', 'Запланирован');
INSERT INTO "SESSION".shedule_session (id_shedule, id_teacher, id_subject, id_classroom, term, exam_date, exam_time, group_number, exam_status) VALUES (3, 2, 9, 10, 2, '2021-06-27', '09:00:00', 'К3140', 'Запланирован');
INSERT INTO "SESSION".shedule_session (id_shedule, id_teacher, id_subject, id_classroom, term, exam_date, exam_time, group_number, exam_status) VALUES (4, 5, 8, 6, 1, '2021-12-18', '11:40:00', 'К3140', 'Проведен');
INSERT INTO "SESSION".shedule_session (id_shedule, id_teacher, id_subject, id_classroom, term, exam_date, exam_time, group_number, exam_status) VALUES (5, 7, 13, 5, 8, '2022-06-28', '10:00:00', 'N33481', 'Запланирован');
INSERT INTO "SESSION".shedule_session (id_shedule, id_teacher, id_subject, id_classroom, term, exam_date, exam_time, group_number, exam_status) VALUES (6, 7, 14, 5, 8, '2022-06-11', '10:00:00', 'N33481', 'Запланирован');
INSERT INTO "SESSION".shedule_session (id_shedule, id_teacher, id_subject,

id_classroom, term, exam_date, exam_time, group_number, exam_status) VALUES (7, 8, 15, 13, 7, '2022-01-16', '10:00:00', 'N33481', 'Проведен');
INSERT INTO "SESSION".shedule_session (id_shedule, id_teacher, id_subject, id_classroom, term, exam_date, exam_time, group_number, exam_status) VALUES (8, 8, 16, 13, 7, '2022-01-22', '11:40:00', 'N33481', 'Проведен');
INSERT INTO "SESSION".shedule_session (id_shedule, id_teacher, id_subject, id_classroom, term, exam_date, exam_time, group_number, exam_status) VALUES (9, 9, 5, 10, 3, '2022-01-18', '13:30:00', 'K3240', 'Проведен');
INSERT INTO "SESSION".shedule_session (id_shedule, id_teacher, id_subject, id_classroom, term, exam_date, exam_time, group_number, exam_status) VALUES (10, 9, 5, 10, 1, '2022-01-25', '11:40:00', 'K3140', 'Проведен');

Заполнение данными таблицы student

--
-- TOC entry 3123 (class 0 OID 17018)
-- Dependencies: 205
-- Data for Name: student; Type: TABLE DATA; Schema: SESSION; Owner: postgres
--

INSERT INTO "SESSION".student (id_student, last_name_student, name_student, patronymic_student, student_status) VALUES (3, 'Мельникова', 'Анна', 'Олеговна', 'Обучается');
INSERT INTO "SESSION".student (id_student, last_name_student, name_student, patronymic_student, student_status) VALUES (4, 'Винтон', 'София', 'Петровна', 'В академ. отпуске');
INSERT INTO "SESSION".student (id_student, last_name_student, name_student, patronymic_student, student_status) VALUES (5, 'Бабан', 'Виктория', '', 'Обучается');
INSERT INTO "SESSION".student (id_student, last_name_student, name_student, patronymic_student, student_status) VALUES (6, 'Вэй', 'Дифэй', '', 'В академ. отпуске');
INSERT INTO "SESSION".student (id_student, last_name_student, name_student, patronymic_student, student_status) VALUES (7, 'Ларичева', 'Дарья', 'Кирилловна', 'Обучается');
INSERT INTO "SESSION".student (id_student, last_name_student, name_student, patronymic_student, student_status) VALUES (8, 'Буй', 'Ань', 'Туан', 'Обучается');
INSERT INTO "SESSION".student (id_student, last_name_student, name_student, patronymic_student, student_status) VALUES (10, 'Жуков', 'Вадим', 'Витальевич', 'Обучается');
INSERT INTO "SESSION".student (id_student, last_name_student, name_student, patronymic_student, student_status) VALUES (11, 'Жуков', 'Дмитрий', 'Витальевич', 'Обучается');
INSERT INTO "SESSION".student (id_student, last_name_student, name_student, patronymic_student, student_status) VALUES (12, 'Хопкинсон', 'Амелия', '', 'Отчислен');
INSERT INTO "SESSION".student (id_student, last_name_student, name_student, patronymic_student, student_status) VALUES (13, 'Каур', 'Барри', '', 'Обучается');
INSERT INTO "SESSION".student (id_student, last_name_student, name_student, patronymic_student, student_status) VALUES (14, 'Клифтон', 'Боб', '', 'В академ. отпуске');
INSERT INTO "SESSION".student (id_student, last_name_student, name_student, patronymic_student, student_status) VALUES (15, 'Устин', 'Денис', 'Алексеевич',

'Обучается');
INSERT INTO "SESSION".student (id_student, last_name_student, name_student, patronymic_student, student_status) VALUES (16, 'Байков', 'Иван', '', 'Обучается');
INSERT INTO "SESSION".student (id_student, last_name_student, name_student, patronymic_student, student_status) VALUES (2, 'Иванов', 'Иван', 'Вадимович', 'Отчислен');
INSERT INTO "SESSION".student (id_student, last_name_student, name_student, patronymic_student, student_status) VALUES (9, 'Ховард', 'Курт', '', 'Отчислен');
INSERT INTO "SESSION".student (id_student, last_name_student, name_student, patronymic_student, student_status) VALUES (1, 'Гафаров', 'Данил', 'Альбертович', 'Обучается');
INSERT INTO "SESSION".student (id_student, last_name_student, name_student, patronymic_student, student_status) VALUES (17, 'Балдина', 'Дарья', 'Даниловна', 'Обучается');

Заполнение данными таблицы study_plan

--
-- TOC entry 3135 (class 0 OID 17132)
-- Dependencies: 217
-- Data for Name: study_plan; Type: TABLE DATA; Schema: SESSION; Owner: postgres
--

INSERT INTO "SESSION".study_plan (id_study_plan, period_from, period_to, id_direction) VALUES (13270, '2020-09-01', '2024-08-31', 3);
INSERT INTO "SESSION".study_plan (id_study_plan, period_from, period_to, id_direction) VALUES (13321, '2020-09-01', '2024-08-31', 5);
INSERT INTO "SESSION".study_plan (id_study_plan, period_from, period_to, id_direction) VALUES (13125, '2020-09-01', '2024-08-31', 2);
INSERT INTO "SESSION".study_plan (id_study_plan, period_from, period_to, id_direction) VALUES (13275, '2020-09-01', '2024-08-31', 4);
INSERT INTO "SESSION".study_plan (id_study_plan, period_from, period_to, id_direction) VALUES (13110, '2020-09-01', '2024-08-31', 1);

Заполнение данными таблицы stydying_student

--
-- TOC entry 3131 (class 0 OID 17094)
-- Dependencies: 213
-- Data for Name: stydying_student; Type: TABLE DATA; Schema: SESSION; Owner: postgres
--

INSERT INTO "SESSION".stydying_student (id_student, id_group, period_education_from, period_education_to, number_record_book) VALUES (1, 7, '2021-09-01', '2022-06-30', 336477);
INSERT INTO "SESSION".stydying_student (id_student, id_group, period_education_from, period_education_to, number_record_book) VALUES (3, 7, '2021-09-01', '2022-06-30', 333871);
INSERT INTO "SESSION".stydying_student (id_student, id_group, period_education_from,

period_education_to, number_record_book) VALUES (5, 1, '2021-09-01', '2022-06-30', 312310);
INSERT INTO "SESSION".stydying_student (id_student, id_group, period_education_from, period_education_to, number_record_book) VALUES (7, 6, '2021-09-01', '2022-06-30', 336702);
INSERT INTO "SESSION".stydying_student (id_student, id_group, period_education_from, period_education_to, number_record_book) VALUES (8, 5, '2021-09-01', '2022-06-30', 288987);
INSERT INTO "SESSION".stydying_student (id_student, id_group, period_education_from, period_education_to, number_record_book) VALUES (10, 3, '2021-09-01', '2022-06-30', 283128);
INSERT INTO "SESSION".stydying_student (id_student, id_group, period_education_from, period_education_to, number_record_book) VALUES (11, 3, '2021-09-01', '2022-06-30', 283129);
INSERT INTO "SESSION".stydying_student (id_student, id_group, period_education_from, period_education_to, number_record_book) VALUES (15, 3, '2021-09-01', '2022-06-30', 283991);
INSERT INTO "SESSION".stydying_student (id_student, id_group, period_education_from, period_education_to, number_record_book) VALUES (16, 2, '2021-09-01', '2022-06-30', 336100);
INSERT INTO "SESSION".stydying_student (id_student, id_group, period_education_from, period_education_to, number_record_book) VALUES (17, 1, '2021-09-01', '2022-06-30', 312407);

Заполнение данными таблицы subject

--
-- TOC entry 3137 (class 0 OID 17146)
-- Dependencies: 219
-- Data for Name: subject; Type: TABLE DATA; Schema: SESSION; Owner: postgres
--

INSERT INTO "SESSION".subject (id_subject, name_subject, type_certification, id_study_plan) VALUES (1, 'Базы данных', 'Зачёт', 13270);
INSERT INTO "SESSION".subject (id_subject, name_subject, type_certification, id_study_plan) VALUES (2, 'Проектирование и реализация баз данных', 'Экзамен', 13270);
INSERT INTO "SESSION".subject (id_subject, name_subject, type_certification, id_study_plan) VALUES (3, 'История', 'Экзамен', 13270);
INSERT INTO "SESSION".subject (id_subject, name_subject, type_certification, id_study_plan) VALUES (4, 'Иностранный язык', 'Зачёт', 13270);
INSERT INTO "SESSION".subject (id_subject, name_subject, type_certification, id_study_plan) VALUES (5, 'Математика', 'Экзамен', 13270);
INSERT INTO "SESSION".subject (id_subject, name_subject, type_certification, id_study_plan) VALUES (6, 'ООП', 'Экзамен', 13270);
INSERT INTO "SESSION".subject (id_subject, name_subject, type_certification, id_study_plan) VALUES (7, 'Визуализация и моделирование', 'Зачёт', 13270);
INSERT INTO "SESSION".subject (id_subject, name_subject, type_certification, id_study_plan) VALUES (8, 'Инфокоммуникационные системы и технологии', 'Курсовая

работа', 13270);
INSERT INTO "SESSION".subject (id_subject, name_subject, type_certification, id_study_plan) VALUES (9, 'Моделирование инфокоммуникационных систем', 'Зачёт', 13270);
INSERT INTO "SESSION".subject (id_subject, name_subject, type_certification, id_study_plan) VALUES (10, 'Математика', 'Экзамен', 13321);
INSERT INTO "SESSION".subject (id_subject, name_subject, type_certification, id_study_plan) VALUES (11, 'Моделирование инфокоммуникационных систем', 'Экзамен', 13321);
INSERT INTO "SESSION".subject (id_subject, name_subject, type_certification, id_study_plan) VALUES (12, 'Основы информационной безопасности', 'Экзамен', 13275);
INSERT INTO "SESSION".subject (id_subject, name_subject, type_certification, id_study_plan) VALUES (13, 'Математические основы криптологии', 'Дифференцированный зачёт', 13275);
INSERT INTO "SESSION".subject (id_subject, name_subject, type_certification, id_study_plan) VALUES (14, 'Теория информации', 'Дифференцированный зачёт', 13275);
INSERT INTO "SESSION".subject (id_subject, name_subject, type_certification, id_study_plan) VALUES (15, 'Защита информации в системе управления базами данных', 'Экзамен', 13275);
INSERT INTO "SESSION".subject (id_subject, name_subject, type_certification, id_study_plan) VALUES (16, 'Обеспечение информационной безопасности мобильных устройств', 'Зачёт', 13275);

Заполнение данными таблицы teacher

--
-- TOC entry 3139 (class 0 OID 17160)
-- Dependencies: 221
-- Data for Name: teacher; Type: TABLE DATA; Schema: SESSION; Owner: postgres
--

INSERT INTO "SESSION".teacher (id_teacher, last_name_teacher, name_teacher, patronymic_teacher, post, id_division) VALUES (1, 'Говорова', 'Марина', 'Михайловна', 'преподаватель', 3);
INSERT INTO "SESSION".teacher (id_teacher, last_name_teacher, name_teacher, patronymic_teacher, post, id_division) VALUES (2, 'Валитова', 'Юлия', 'Олеговна', 'доцент', 3);
INSERT INTO "SESSION".teacher (id_teacher, last_name_teacher, name_teacher, patronymic_teacher, post, id_division) VALUES (3, 'Артемов', 'Максим', '', 'профессор', 2);
INSERT INTO "SESSION".teacher (id_teacher, last_name_teacher, name_teacher, patronymic_teacher, post, id_division) VALUES (4, 'Асач', 'Алексей', 'Владимирович', 'ведущий инженер', 7);
INSERT INTO "SESSION".teacher (id_teacher, last_name_teacher, name_teacher, patronymic_teacher, post, id_division) VALUES (6, 'Будько', 'Михаил', 'Юрьевич', 'доцент', 5);
INSERT INTO "SESSION".teacher (id_teacher, last_name_teacher, name_teacher, patronymic_teacher, post, id_division) VALUES (5, 'Горлушкина', 'Наталия', 'Николаевна', 'доцент', 3);

```
INSERT INTO "SESSION".teacher (id_teacher, last_name_teacher, name_teacher, patronymic_teacher, post, id_division) VALUES (7, 'Кузнецов', 'Александр', 'Юрьевич', 'доцент', 5);
INSERT INTO "SESSION".teacher (id_teacher, last_name_teacher, name_teacher, patronymic_teacher, post, id_division) VALUES (8, 'Таранов', 'Сергей', 'Владимирович', 'доцент', 5);
INSERT INTO "SESSION".teacher (id_teacher, last_name_teacher, name_teacher, patronymic_teacher, post, id_division) VALUES (9, 'Блаженов', 'Алексей', 'Викторович', 'доцент', 8);
```

Первичные ключи

```
--
-- TOC entry 2948 (class 2606 OID 17009)
-- Name: classroom classroom_pkey; Type: CONSTRAINT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".classroom
    ADD CONSTRAINT classroom_pkey PRIMARY KEY (id_classroom);



--
-- TOC entry 2955 (class 2606 OID 17073)
-- Name: direction direction_pkey; Type: CONSTRAINT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".direction
    ADD CONSTRAINT direction_pkey PRIMARY KEY (id_direction);



--
-- TOC entry 2953 (class 2606 OID 17065)
-- Name: division division_pkey; Type: CONSTRAINT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".division
    ADD CONSTRAINT division_pkey PRIMARY KEY (id_division);



--
-- TOC entry 2957 (class 2606 OID 17086)
-- Name: group group_pkey; Type: CONSTRAINT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION"."group"
    ADD CONSTRAINT group_pkey PRIMARY KEY (id_group);
```

```
--
-- TOC entry 2973 (class 2606 OID 17204)
-- Name: passing_exam passing_exam_pkey; Type: CONSTRAINT; Schema: SESSION;
Owner: postgres
--

ALTER TABLE ONLY "SESSION".passing_exam
    ADD CONSTRAINT passing_exam_pkey PRIMARY KEY (id_exam);



--
-- TOC entry 2946 (class 2606 OID 17001)
-- Name: place place_pkey; Type: CONSTRAINT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".place
    ADD CONSTRAINT place_pkey PRIMARY KEY (id_place);



--
-- TOC entry 2963 (class 2606 OID 17123)
-- Name: scholarship scholarship_pkey; Type: CONSTRAINT; Schema: SESSION; Owner:
postgres
--

ALTER TABLE ONLY "SESSION".scholarship
    ADD CONSTRAINT scholarship_pkey PRIMARY KEY (id_scholarship);



--
-- TOC entry 2971 (class 2606 OID 17179)
-- Name: shedule_session shedule_session_pkey; Type: CONSTRAINT; Schema: SESSION;
Owner: postgres
--

ALTER TABLE ONLY "SESSION".shedule_session
    ADD CONSTRAINT shedule_session_pkey PRIMARY KEY (id_shedule);



--
-- TOC entry 2951 (class 2606 OID 17028)
-- Name: student student_pkey; Type: CONSTRAINT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".student
    ADD CONSTRAINT student_pkey PRIMARY KEY (id_student);
```

```
--
-- TOC entry 2965 (class 2606 OID 17138)
-- Name: study_plan study_plan_pkey; Type: CONSTRAINT; Schema: SESSION; Owner:
postgres
--

ALTER TABLE ONLY "SESSION".study_plan
    ADD CONSTRAINT study_plan_pkey PRIMARY KEY (id_study_plan);



--
-- TOC entry 2961 (class 2606 OID 17100)
-- Name: stydying_student stydying_student_pkey; Type: CONSTRAINT; Schema:
SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".stydying_student
    ADD CONSTRAINT stydying_student_pkey PRIMARY KEY (number_record_book);



--
-- TOC entry 2967 (class 2606 OID 17152)
-- Name: subject subject_pkey; Type: CONSTRAINT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".subject
    ADD CONSTRAINT subject_pkey PRIMARY KEY (id_subject);



--
-- TOC entry 2969 (class 2606 OID 17165)
-- Name: teacher teacher_pkey; Type: CONSTRAINT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".teacher
    ADD CONSTRAINT teacher_pkey PRIMARY KEY (id_teacher);
```

Индексы

```
--
-- TOC entry 2958 (class 1259 OID 17111)
-- Name: fki_group; Type: INDEX; Schema: SESSION; Owner: postgres
--

CREATE INDEX fki_group ON "SESSION".stydying_student USING btree (id_group);
```

```
--
-- TOC entry 2949 (class 1259 OID 17015)
-- Name: fki_place; Type: INDEX; Schema: SESSION; Owner: postgres
--

CREATE INDEX fki_place ON "SESSION".classroom USING btree (id_place);



--
-- TOC entry 2959 (class 1259 OID 17112)
-- Name: fki_student; Type: INDEX; Schema: SESSION; Owner: postgres
--

CREATE INDEX fki_student ON "SESSION".stydying_student USING btree (id_student);
```

Внешние ключи

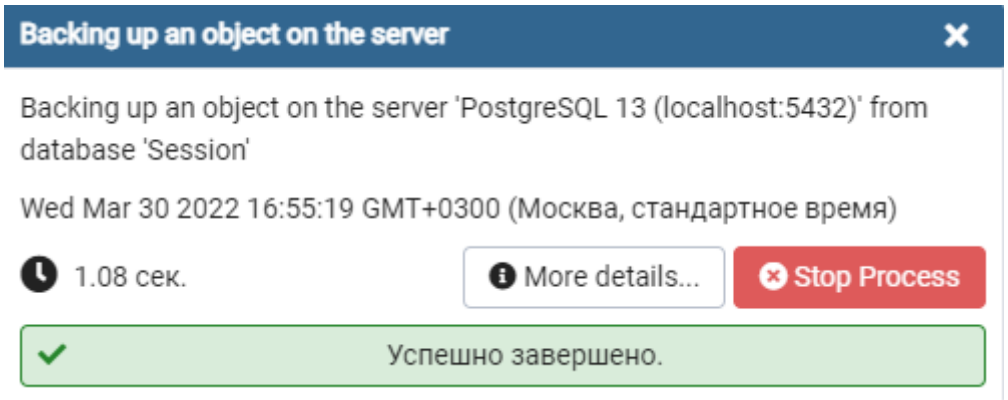
```
--
-- TOC entry 2983 (class 2606 OID 17180)
-- Name: shedule_session classroom; Type: FK CONSTRAINT; Schema: SESSION; Owner:
postgres
--

ALTER TABLE ONLY "SESSION".shedule_session
    ADD CONSTRAINT classroom FOREIGN KEY (id_classroom) REFERENCES
"SESSION".classroom(id_classroom);



--
-- TOC entry 2976 (class 2606 OID 17087)
-- Name: group direction; Type: FK CONSTRAINT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION"."group"
    ADD CONSTRAINT direction FOREIGN KEY (id_direction) REFERENCES
"SESSION".direction(id_direction);



--
-- TOC entry 2980 (class 2606 OID 17139)
-- Name: study_plan direction; Type: FK CONSTRAINT; Schema: SESSION; Owner:
postgres
--

ALTER TABLE ONLY "SESSION".study_plan
    ADD CONSTRAINT direction FOREIGN KEY (id_direction) REFERENCES
"SESSION".direction(id_direction);
```

```
--
-- TOC entry 2975 (class 2606 OID 17074)
-- Name: direction division; Type: FK CONSTRAINT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".direction
    ADD CONSTRAINT division FOREIGN KEY (id_division) REFERENCES
"SESSION".division(id_division);



--
-- TOC entry 2982 (class 2606 OID 17166)
-- Name: teacher division; Type: FK CONSTRAINT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".teacher
    ADD CONSTRAINT division FOREIGN KEY (id_division) REFERENCES
"SESSION".division(id_division);



--
-- TOC entry 2977 (class 2606 OID 17101)
-- Name: stydying_student group; Type: FK CONSTRAINT; Schema: SESSION; Owner:
postgres
--

ALTER TABLE ONLY "SESSION".stydying_student
    ADD CONSTRAINT "group" FOREIGN KEY (id_group) REFERENCES
"SESSION"."group"(id_group);



--
-- TOC entry 2974 (class 2606 OID 17010)
-- Name: classroom place; Type: FK CONSTRAINT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".classroom
    ADD CONSTRAINT place FOREIGN KEY (id_place) REFERENCES
"SESSION".place(id_place);



--
-- TOC entry 2986 (class 2606 OID 17205)
-- Name: passing_exam shedule; Type: FK CONSTRAINT; Schema: SESSION; Owner:
postgres
--

ALTER TABLE ONLY "SESSION".passing_exam
```

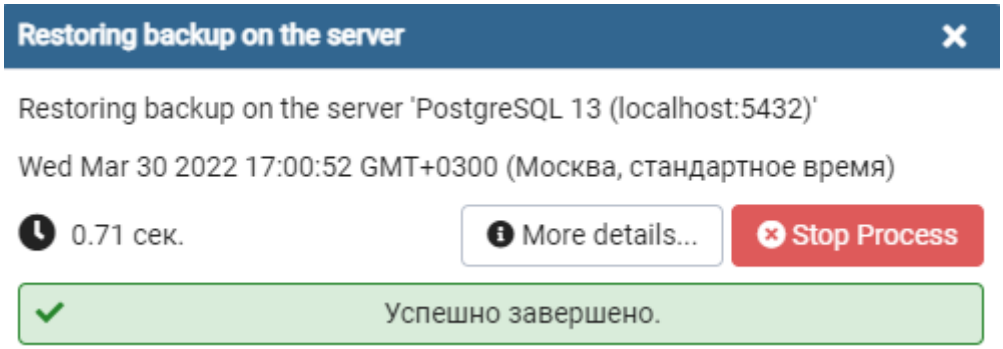
```
    ADD CONSTRAINT shedule FOREIGN KEY (id_shedule) REFERENCES
"SESSION".shedule_session(id_shedule);


--
-- TOC entry 2979 (class 2606 OID 17124)
-- Name: scholarship st_student; Type: FK CONSTRAINT; Schema: SESSION; Owner:
postgres
--

ALTER TABLE ONLY "SESSION".scholarship
    ADD CONSTRAINT st_student FOREIGN KEY (number_record_book) REFERENCES
"SESSION".stydying_student(number_record_book);


--
-- TOC entry 2987 (class 2606 OID 17210)
-- Name: passing_exam st_student; Type: FK CONSTRAINT; Schema: SESSION; Owner:
postgres
--

ALTER TABLE ONLY "SESSION".passing_exam
    ADD CONSTRAINT st_student FOREIGN KEY (number_record_book) REFERENCES
"SESSION".stydying_student(number_record_book);


--
-- TOC entry 2978 (class 2606 OID 17230)
-- Name: stydying_student student; Type: FK CONSTRAINT; Schema: SESSION; Owner:
postgres
--

ALTER TABLE ONLY "SESSION".stydying_student
    ADD CONSTRAINT student FOREIGN KEY (id_student) REFERENCES
"SESSION".student(id_student);


--
-- TOC entry 2981 (class 2606 OID 17153)
-- Name: subject study_plan; Type: FK CONSTRAINT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".subject
    ADD CONSTRAINT study_plan FOREIGN KEY (id_study_plan) REFERENCES
"SESSION".study_plan(id_study_plan);


--
```

```
-- TOC entry 2984 (class 2606 OID 17185)
-- Name: shedule_session subject; Type: FK CONSTRAINT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".shedule_session
    ADD CONSTRAINT subject FOREIGN KEY (id_subject) REFERENCES "SESSION".subject(id_subject);


--
-- TOC entry 2985 (class 2606 OID 17190)
-- Name: shedule_session teacher; Type: FK CONSTRAINT; Schema: SESSION; Owner: postgres
--

ALTER TABLE ONLY "SESSION".shedule_session
    ADD CONSTRAINT teacher FOREIGN KEY (id_teacher) REFERENCES "SESSION".teacher(id_teacher);


-- Completed on 2022-03-30 21:47:07

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

4) Резервное копирование данных



5) Восстановление базы данных



Вывод:

В ходе выполнения работы была создана база данных в PostgreSQL, созданы таблицы и ограничения на значение столбцов, в базу данных были занесены рабочие данные, а также была создана логическая модель базы данных и dump.