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**Лабораторная работа №1**  
по дисциплине  
**'Информационные системы и базы данных'**  
**Вариант 3893**

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## 1 Текст задания.

Для выполнения лабораторной работы №1 необходимо:

1. На основе предложенной предметной области (текста) составить ее описание. Из полученного описания выделить сущности, их атрибуты и связи.
2. Составить инфологическую модель.
3. Составить даталогическую модель. При описании типов данных для атрибутов должны использоваться типы из СУБД PostgreSQL.
4. Реализовать даталогическую модель в PostgreSQL. При описании и реализации даталогической модели должны учитываться ограничения целостности, которые характерны для полученной предметной области.
5. Заполнить созданные таблицы тестовыми данными.

Для создания объектов базы данных у каждого студента есть своя схема. Название схемы соответствует имени пользователя в базе studs (sXXXXXX). Команда для подключения к базе studs:

```
psql -h pg -d studs
```

Каждый студент должен использовать свою схему при работе над лабораторной работой №1 (а также в рамках выполнения 2, 3 и 4 этапа курсовой работы).

Отчёт по лабораторной работе должен содержать:

1. Текст задания.
2. Описание предметной области.
3. Список сущностей и их классификацию (стержневая, ассоциация, характеристика).
4. Инфологическая модель (ER-диаграмма в расширенном виде - с атрибутами, ключами...).
5. Даталогическая модель (должна содержать типы атрибутов, вспомогательные таблицы для отображения связей "многие-ко-многим").
6. Реализация даталогической модели на SQL.
7. Выводы по работе.

## 2 Описание предметной области.

Он не стал дожидаться ответа и правильно сделал. Сирэйнис даже не пошевелинулась, но он тотчас же почувствовал, что его тело перестает ему повиноваться. Сила, столкнувшаяся с его волей, оказалась куда более могущественной, чем он ожидал, и это навело его на мысль, что Сирэйнис, возможно, помогало огромное число людей. Беспомощно повлекся он обратно к дому, и на какой-то ужасный момент ему даже подумалось, что великолепный его план провалился.

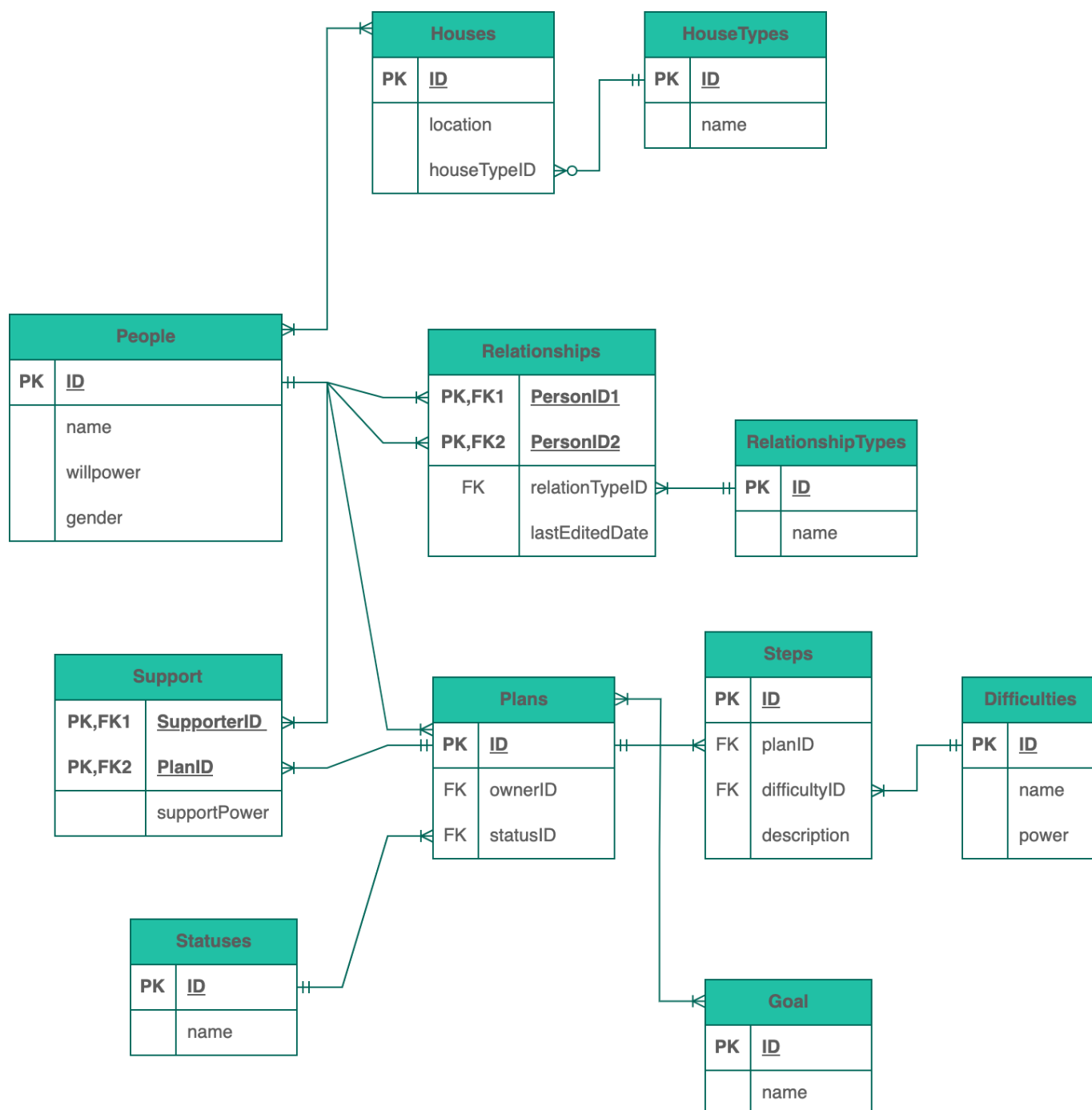
### **Творческий пересказ:**

Люди хотят достичь некоторых целей. Для достижения целей, люди строят планы, которые состоят из определенного набора шагов разной сложности. Чтобы преодолеть сложности на своём пути люди обладают силой воли и поддержкой других людей. Так же у людей есть свой дом или несколько домов, где они живут с другими жильцами, которые могут быть им родственниками, друзьями, а порой даже врагами.

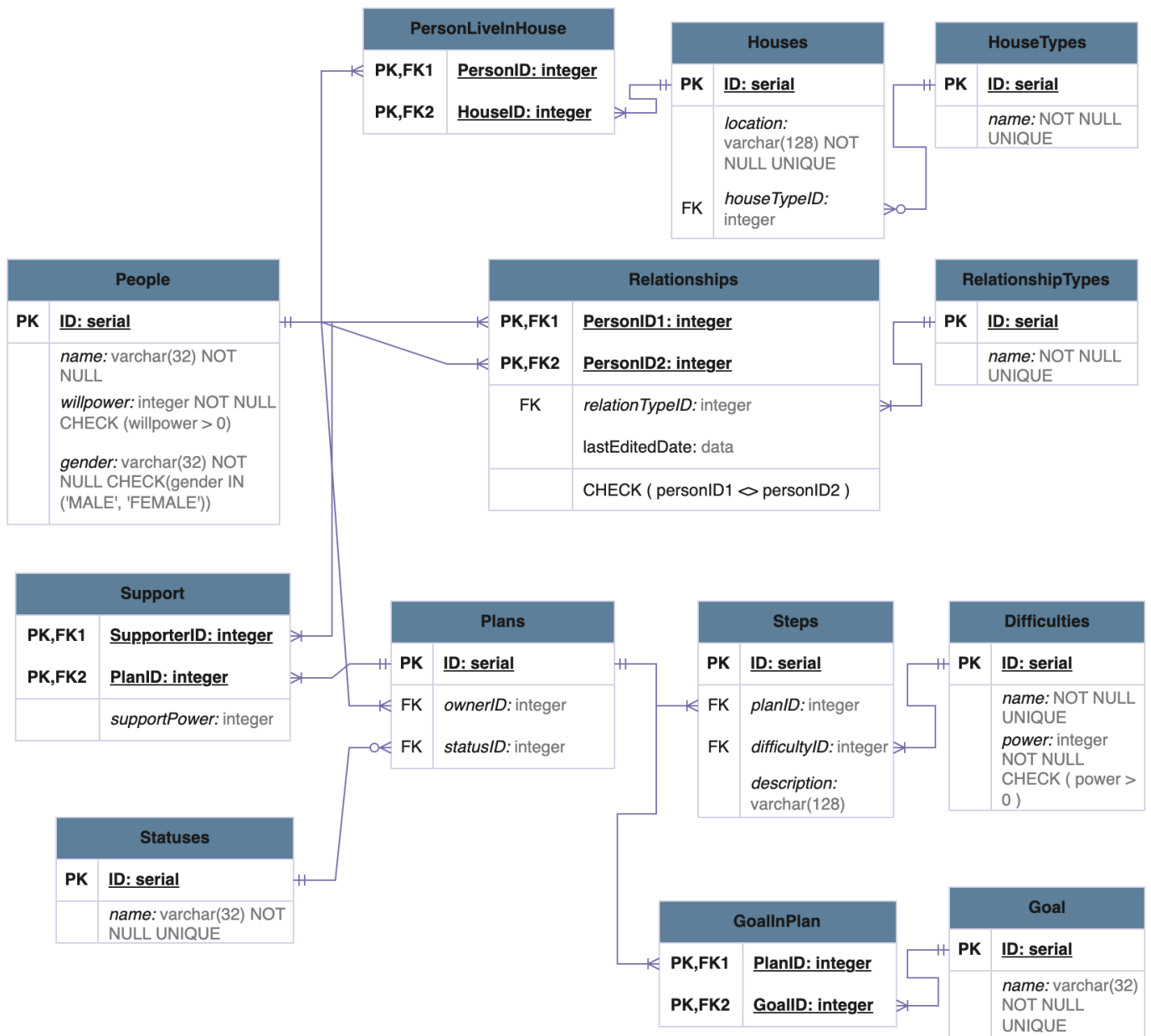
### 3 Список сущностей и их классификацию (стержневая, ассоциация, характеристика).

Сущность	Аттрибуты	Вид
People	id, name, willpower, gender	стержневая
Houses	id, location, houseType(Id)	стержневая
HouseTypes	id, name	характеристика
Relationships	person1(id), person2(id), relationType(id), lastEditedDate	ассоциация
RelationshipTypes	id, name	характеристика
Plans	id, owner(id), status(id)	стержневая
Steps	id, plan(id), difficulty(id), description	стержневая
Difficulties	id, name, power	характеристика
Goal	id, name	стержневая
Support	supporter(id), plan(id), supportPower	ассоциация
Statuses	id, name	характеристика

## 4 Инфологическая модель



## 5 Дatalogическая модель



## 6 Реализация дatalogической модели на SQL.

Создание таблиц:

```

1 CREATE TABLE IF NOT EXISTS people (
2     id                serial        PRIMARY KEY,
3     name              varchar(32)   NOT NULL,
4     willpower         integer       NOT NULL CHECK ( willpower > 0),
5     gender            varchar(32)   NOT NULL CHECK (gender IN ('MALE',
6                                     'FEMALE'))
7 );
8 CREATE TABLE IF NOT EXISTS houseTypes (

```

```

9      id      serial      PRIMARY KEY,
10     name    varchar(32)   NOT NULL UNIQUE
11 );
12
13 CREATE TABLE IF NOT EXISTS houses (
14     id      serial      PRIMARY KEY,
15     location varchar(128) NOT NULL UNIQUE,
16     houseTypeId integer   REFERENCES houseTypes(id) ON DELETE
        SET NULL
17 );
18
19 CREATE TABLE IF NOT EXISTS personLiveInHouse(
20     personId integer   REFERENCES people(id) ON DELETE CASCADE,
21     houseId   integer   REFERENCES houses(id) ON DELETE CASCADE,
22     PRIMARY KEY (personId, houseId)
23 );
24
25 CREATE TABLE IF NOT EXISTS relationshipTypes (
26     id      serial      PRIMARY KEY,
27     name    varchar(32)   NOT NULL UNIQUE
28 );
29
30 CREATE TABLE IF NOT EXISTS relationships (
31     personId1 integer   REFERENCES people(id) ON DELETE CASCADE,
32     personId2 integer   REFERENCES people(id) ON DELETE CASCADE,
33     relationTypeId integer REFERENCES relationshipTypes(id) ON DELETE
        CASCADE,
34     lastEditedDate date,
35     PRIMARY KEY (personId1, personId2),
36     CHECK ( personId1 <> personId2 )
37 );
38
39 CREATE TABLE IF NOT EXISTS statuses (
40     id      serial      PRIMARY KEY,
41     name    varchar(32)   NOT NULL UNIQUE
42 );
43
44 CREATE TABLE IF NOT EXISTS goal (
45     id      serial      PRIMARY KEY,
46     name    varchar(128)   NOT NULL UNIQUE
47 );
48
49 CREATE TABLE IF NOT EXISTS difficulties (
50     id      serial      PRIMARY KEY,
51     name    varchar(32)   NOT NULL UNIQUE,
52     power   integer      NOT NULL CHECK ( power > 0)
53 );
54
55 CREATE TABLE IF NOT EXISTS plans (
56     id      serial      PRIMARY KEY,
57     ownerId integer      REFERENCES people(id) ON DELETE CASCADE,

```

```

58     statusId      integer      REFERENCES statuses(id) ON DELETE SET NULL
59 );
60
61 CREATE TABLE IF NOT EXISTS goalInPlan (
62     planId        integer      REFERENCES plans(id) ON DELETE CASCADE,
63     goalId        integer      REFERENCES goal(id) ON DELETE CASCADE,
64     PRIMARY KEY (planId, goalId)
65 );
66
67 CREATE TABLE IF NOT EXISTS steps (
68     id            serial        PRIMARY KEY,
69     planId        integer      REFERENCES plans(id) ON DELETE CASCADE,
70     difficultyId  integer      REFERENCES difficulties(id) ON DELETE
71         CASCADE,
72     description   varchar(128)
73 );
74
75 CREATE TABLE IF NOT EXISTS support(
76     supporterId   integer      REFERENCES people(id) ON DELETE CASCADE,
77     planId        integer      REFERENCES plans(id) ON DELETE CASCADE,
78     supportPower  integer,
79     PRIMARY KEY (supporterId, planId)

```

## Удаление таблиц:

```

1 DROP TABLE IF EXISTS goalInPlan;
2 DROP TABLE IF EXISTS goal;
3 DROP TABLE IF EXISTS steps;
4 DROP TABLE IF EXISTS difficulties;
5 DROP TABLE IF EXISTS relationships;
6 DROP TABLE IF EXISTS relationshipTypes;
7 DROP TABLE IF EXISTS support;
8 DROP TABLE IF EXISTS personliveinhouse;
9 DROP TABLE IF EXISTS plans;
10 DROP TABLE IF EXISTS people;
11 DROP TABLE IF EXISTS statuses;
12 DROP TABLE IF EXISTS houses;
13 DROP TABLE IF EXISTS houseTypes;

```

## Заполнение тестовых значений:

```

1 INSERT INTO people values (DEFAULT, 'Floyd', 400, 'MALE');
2 INSERT INTO people values (DEFAULT, 'Anna', 500, 'FEMALE');
3 INSERT INTO people values (DEFAULT, 'Halvorsen', 300, 'MALE');
4 INSERT INTO people values (DEFAULT, 'Sirenis', 600, 'FEMALE');
5
6 INSERT INTO houseTypes values (DEFAULT, 'apartments') ON CONFLICT DO
    NOTHING;

```



```

7 INSERT INTO houseTypes values (DEFAULT, 'detached house') ON CONFLICT DO
  NOTHING;
8 INSERT INTO houseTypes values (DEFAULT, 'cottage') ON CONFLICT DO NOTHING;
9 INSERT INTO houseTypes values (DEFAULT, 'townhouse') ON CONFLICT DO
  NOTHING;
10
11 INSERT INTO houses values (DEFAULT, 'Kronverksky Pr. 49', (SELECT
  housetypes.id FROM houseTypes WHERE name='apartments'));
12 INSERT INTO houses values (DEFAULT, 'Lomonosova Street, 9', (SELECT
  housetypes.id FROM houseTypes WHERE name='detached house'));
13 INSERT INTO houses values (DEFAULT, 'Tchaykovskogo St, 11/2', (SELECT
  housetypes.id FROM houseTypes WHERE name='cottage'));
14 INSERT INTO houses values (DEFAULT, 'Grivtsova Lane, 14', (SELECT
  housetypes.id FROM houseTypes WHERE name='townhouse'));
15 INSERT INTO houses values (DEFAULT, 'Birzhevaya Line, 14', (SELECT
  housetypes.id FROM houseTypes WHERE name='apartments'));
16
17 INSERT INTO personliveinhouse values (
18     (SELECT id FROM people WHERE
19         name='Floyd'),
19     (SELECT id FROM houses WHERE
20         location='Kronverksky Pr. 49')
21 );
22 INSERT INTO personliveinhouse values (
23     (SELECT id FROM people WHERE
24         name='Anna'),
25     (SELECT id FROM houses WHERE
26         location='Kronverksky Pr. 49')
27 );
28 INSERT INTO personliveinhouse values (
29     (SELECT id FROM people WHERE
30         name='Sirenis'),
31     (SELECT id FROM houses WHERE
32         location='Kronverksky Pr. 49')
33 );
34 INSERT INTO personliveinhouse values (
35     (SELECT id FROM people WHERE
36         name='Halvorsen'),
37     (SELECT id FROM houses WHERE
38         location='Lomonosova Street, 9')
39 );
40 INSERT INTO personliveinhouse values (
41     (SELECT id FROM people WHERE
42         name='Anna'),

```

```

39         (SELECT id FROM houses WHERE
40             location='Lomonosova Street, 9')
41 INSERT INTO personliveinhouse values (
42     (SELECT id FROM people WHERE
43         name='Sirenis'),
44     (SELECT id FROM houses WHERE
45         location='Lomonosova Street, 9')
46 );
47 INSERT INTO personliveinhouse values (
48     (SELECT id FROM people WHERE
49         name='Halvorsen'),
50     (SELECT id FROM houses WHERE
51         location='Tchaykovskogo St,
52         11/2')
53 );
54 INSERT INTO personliveinhouse values (
55     (SELECT id FROM people WHERE
56         name='Anna'),
57     (SELECT id FROM houses WHERE
58         location='Tchaykovskogo St,
59         11/2')
60 );
61 INSERT INTO personliveinhouse values (
62     (SELECT id FROM people WHERE
63         name='Anna'),
64     (SELECT id FROM houses WHERE
65         location='Grivtsova Lane, 14')
66 );
67 INSERT INTO personliveinhouse values (
68     (SELECT id FROM people WHERE
69         name='Sirenis'),
70     (SELECT id FROM houses WHERE
71         location='Grivtsova Lane, 14')
72 );
73 INSERT INTO personliveinhouse values (
74     (SELECT id FROM people WHERE
75         name='Halvorsen'),
76     (SELECT id FROM houses WHERE
77         location='Birzhevaya Line, 14')
78 );
79
80 INSERT INTO relationshiptypes values (DEFAULT, 'friend');
81 INSERT INTO relationshiptypes values (DEFAULT, 'enemy');
82 INSERT INTO relationshiptypes values (DEFAULT, 'relative');
83 INSERT INTO relationshiptypes values (DEFAULT, 'colleague');
84
85 INSERT INTO relationships values (

```

```

74         (SELECT id FROM people WHERE
75             name='Floyd'),
76         (SELECT id FROM people WHERE name='Anna'),
77         (SELECT id FROM relationshiptypes WHERE
78             name='friend'),
79         '2019-01-01'
80     );
81 INSERT INTO relationships values (
82     (SELECT id FROM people WHERE
83         name='Floyd'),
84     (SELECT id FROM people WHERE
85         name='Halvorsen'),
86     (SELECT id FROM relationshiptypes
87         WHERE name='enemy'),
88     '2020-03-12'
89 );
90 INSERT INTO relationships values (
91     (SELECT id FROM people WHERE
92         name='Floyd'),
93     (SELECT id FROM people WHERE
94         name='Sirenis'),
95     (SELECT id FROM relationshiptypes
96         WHERE name='relative'),
97     '2022-12-01'
98 );
99 INSERT INTO relationships values (
100     (SELECT id FROM people WHERE
101         name='Anna'),
102     (SELECT id FROM people WHERE
103         name='Halvorsen'),
104     (SELECT id FROM relationshiptypes
105         WHERE name='colleague'),
106     '2020-04-11'
107 );
108 INSERT INTO relationships values (
109     (SELECT id FROM people WHERE
110         name='Anna'),
111     (SELECT id FROM people WHERE
112         name='Sirenis'),
113     (SELECT id FROM relationshiptypes
114         WHERE name='friend'),
115     '2020-04-11'
116 );
117 INSERT INTO relationships values (
118     (SELECT id FROM people WHERE name='Anna'),
119     (SELECT id FROM people WHERE
120         name='Floyd'),
121     (SELECT id FROM relationshiptypes
122         WHERE name='friend'),
123     '2021-07-02'
124 );

```

```

109 INSERT INTO relationships values (
110     (SELECT id FROM people WHERE
111         name='Halvorsen'),
112     (SELECT id FROM people WHERE
113         name='Sirenis'),
114     (SELECT id FROM relationshiptypes
115         WHERE name='enemy'),
116     '2022-08-23'
117 );
118 INSERT INTO relationships values (
119     (SELECT id FROM people WHERE
120         name='Halvorsen'),
121     (SELECT id FROM people WHERE
122         name='Anna'),
123     (SELECT id FROM relationshiptypes
124         WHERE name='colleague'),
125     '2022-05-24'
126 );
127 INSERT INTO relationships values (
128     (SELECT id FROM people WHERE
129         name='Halvorsen'),
130     (SELECT id FROM people WHERE
131         name='Floyd'),
132     (SELECT id FROM relationshiptypes
133         WHERE name='enemy'),
134     '2022-03-13'
135 );
136 INSERT INTO relationships values (
137     (SELECT id FROM people WHERE
138         name='Sirenis'),
139     (SELECT id FROM people WHERE
140         name='Anna'),
141     (SELECT id FROM relationshiptypes
142         WHERE name='friend'),
143     '2022-04-14'
144 );
145 INSERT INTO relationships values (
146     (SELECT id FROM people WHERE
147         name='Sirenis'),
148     (SELECT id FROM people WHERE
149         name='Halvorsen'),
150     (SELECT id FROM relationshiptypes
151         WHERE name='enemy'),
152     '2022-04-14'
153 );
154 INSERT INTO relationships values (
155     (SELECT id FROM people WHERE
156         name='Sirenis'),
157     (SELECT id FROM people WHERE
158         name='Floyd'),
159     (SELECT id FROM relationshiptypes
160         WHERE name='enemy'),
161     '2022-04-14'
162 );

```

```

142         (SELECT id FROM relationshiptypes
143             WHERE name='relative'),
144         '2022-04-14'
145     );
146
147 INSERT INTO difficulties values (DEFAULT, 'easy', 100);
148 INSERT INTO difficulties values (DEFAULT, 'medium', 200);
149 INSERT INTO difficulties values (DEFAULT, 'hard', 300);
150
151 INSERT INTO statuses values (DEFAULT, 'active');
152 INSERT INTO statuses values (DEFAULT, 'done');
153 INSERT INTO statuses values (DEFAULT, 'failed');
154 INSERT INTO statuses values (DEFAULT, 'paused');
155
156 INSERT INTO plans values (
157     DEFAULT,
158     (SELECT id FROM people WHERE name='Floyd'),
159     (SELECT id FROM statuses WHERE name='active')
160 );
161 INSERT INTO plans values (
162     DEFAULT,
163     (SELECT id FROM people WHERE name='Anna'),
164     (SELECT id FROM statuses WHERE name='paused')
165 );
166 INSERT INTO plans values (
167     DEFAULT,
168     (SELECT id FROM people WHERE name='Halvorsen'),
169     (SELECT id FROM statuses WHERE name='done')
170 );
171 INSERT INTO plans values (
172     DEFAULT,
173     (SELECT id FROM people WHERE name='Sirenis'),
174     (SELECT id FROM statuses WHERE name='failed')
175 );
176 INSERT INTO plans values (
177     DEFAULT,
178     (SELECT id FROM people WHERE name='Floyd'),
179     (SELECT id FROM statuses WHERE name='failed')
180 );
181
182 INSERT INTO steps values (
183     DEFAULT,
184     (SELECT id FROM plans WHERE ownerid=(SELECT id
185         FROM people WHERE name='Floyd') AND
186         statusid=(SELECT id FROM statuses WHERE
187             name='active')),
185     (SELECT id FROM difficulties WHERE name='easy'),
186     'Go to the store'
187 );
188 INSERT INTO steps values (

```

```

189         DEFAULT,
190         (SELECT id FROM plans WHERE ownerid=(SELECT id
           FROM people WHERE name='Floyd') AND
           statusid=(SELECT id FROM statuses WHERE
           name='active')),
191         (SELECT id FROM difficulties WHERE
           name='medium'),
192         'Buy a new phone'
193     );
194 INSERT INTO steps values (
195     DEFAULT,
196     (SELECT id FROM plans WHERE ownerid=(SELECT id
           FROM people WHERE name='Floyd') AND
           statusid=(SELECT id FROM statuses WHERE
           name='active')),
197     (SELECT id FROM difficulties WHERE name='hard'),
198     'Buy a new car'
199 );
200 INSERT INTO steps values (
201     DEFAULT,
202     (SELECT id FROM plans WHERE ownerid=(SELECT id
           FROM people WHERE name='Anna') AND
           statusid=(SELECT id FROM statuses WHERE
           name='paused')),
203     (SELECT id FROM difficulties WHERE name='easy'),
204     'Pass the exam'
205 );
206 INSERT INTO steps values (
207     DEFAULT,
208     (SELECT id FROM plans WHERE ownerid=(SELECT id
           FROM people WHERE name='Anna') AND
           statusid=(SELECT id FROM statuses WHERE
           name='paused')),
209     (SELECT id FROM difficulties WHERE name='hard'),
210     'Graduate from university'
211 );
212 INSERT INTO steps values (
213     DEFAULT,
214     (SELECT id FROM plans WHERE ownerid=(SELECT id
           FROM people WHERE name='Halvorsen') AND
           statusid=(SELECT id FROM statuses WHERE
           name='done')),
215     (SELECT id FROM difficulties WHERE
           name='easy'),
216     'Do the laboratory work'
217 );
218 INSERT INTO steps values (
219     DEFAULT,
220     (SELECT id FROM plans WHERE ownerid=(SELECT id
           FROM people WHERE name='Halvorsen') AND
           statusid=(SELECT id FROM statuses WHERE

```

```

221         name='done')),
222     (SELECT id FROM difficulties WHERE name='hard'),
223     'Submit the laboratory work'
224 );
225 INSERT INTO steps values (
226     DEFAULT,
227     (SELECT id FROM plans WHERE ownerid=(SELECT id
228         FROM people WHERE name='Halvorsen') AND
229         statusid=(SELECT id FROM statuses WHERE
230             name='done')),
231     (SELECT id FROM difficulties WHERE name='hard'),
232     'Answer the questions'
233 );
234 INSERT INTO steps values (
235     DEFAULT,
236     (SELECT id FROM plans WHERE ownerid=(SELECT id
237         FROM people WHERE name='Halvorsen') AND
238         statusid=(SELECT id FROM statuses WHERE
239             name='done')),
240     (SELECT id FROM difficulties WHERE name='hard'),
241     'Conquer the world'
242 );
243 INSERT INTO steps values (
244     DEFAULT,
245     (SELECT id FROM plans WHERE ownerid=(SELECT id
246         FROM people WHERE name='Sirenis') AND
247         statusid=(SELECT id FROM statuses WHERE
248             name='failed')),
249     (SELECT id FROM difficulties WHERE name='easy'),
250     'Do the homework'
251 );
252 INSERT INTO steps values (
253     DEFAULT,
254     (SELECT id FROM plans WHERE ownerid=(SELECT id
255         FROM people WHERE name='Sirenis') AND
256         statusid=(SELECT id FROM statuses WHERE
257             name='failed')),
258     (SELECT id FROM difficulties WHERE name='medium'),
259     'Brush teeth'
260 );
261 INSERT INTO steps values (
262     DEFAULT,
263     (SELECT id FROM plans WHERE ownerid=(SELECT id
264         FROM people WHERE name='Sirenis') AND
265         statusid=(SELECT id FROM statuses WHERE
266             name='failed')),
267     (SELECT id FROM difficulties WHERE name='hard'),
268     'Go to bed'
269 );
270 INSERT INTO steps values (

```

```

255         DEFAULT,
256         (SELECT id FROM plans WHERE ownerid=(SELECT id
            FROM people WHERE name='Floyd') AND
            statusid=(SELECT id FROM statuses WHERE
            name='failed')),
257         (SELECT id FROM difficulties WHERE
            name='easy'),
258         'Become a trillionaire'
259     );
260
261 INSERT INTO goal values (
262     DEFAULT,
263     'Become a millionaire from billionaire'
264 );
265 INSERT INTO goal values (
266     DEFAULT,
267     'Graduate from university'
268 );
269 INSERT INTO goal values (
270     DEFAULT,
271     'Conquer the world'
272 );
273 INSERT INTO goal values (
274     DEFAULT,
275     'Submit the laboratory work'
276 );
277 INSERT INTO goal values (
278     DEFAULT,
279     'Go to sleep'
280 );
281
282 INSERT INTO goalinplan values (
283     (SELECT id FROM goal WHERE name='Become a
        millionaire from billionaire'),
284     (SELECT id FROM plans WHERE ownerid=(SELECT
        id FROM people WHERE name='Floyd') AND
        statusid=(SELECT id FROM statuses WHERE
        name='active'))
285 );
286 INSERT INTO goalinplan values (
287     (SELECT id FROM goal WHERE name='Graduate
        from university'),
288     (SELECT id FROM plans WHERE ownerid=(SELECT
        id FROM people WHERE name='Anna') AND
        statusid=(SELECT id FROM statuses WHERE
        name='paused'))
289 );
290 INSERT INTO goalinplan values (
291     (SELECT id FROM goal WHERE name='Conquer
        the world'),

```



```

292         (SELECT id FROM plans WHERE ownerid=(SELECT
           id FROM people WHERE name='Halvorsen')
           AND statusid=(SELECT id FROM statuses
           WHERE name='done'))
293     );
294 INSERT INTO goalinplan values (
295     (SELECT id FROM goal WHERE name='Submit the
           laboratory work'),
296     (SELECT id FROM plans WHERE ownerid=(SELECT
           id FROM people WHERE name='Halvorsen')
           AND statusid=(SELECT id FROM statuses
           WHERE name='done'))
297 );
298 INSERT INTO goalinplan values (
299     (SELECT id FROM goal WHERE name='Go to
           sleep'),
300     (SELECT id FROM plans WHERE ownerid=(SELECT
           id FROM people WHERE name='Sirenis') AND
           statusid=(SELECT id FROM statuses WHERE
           name='failed'))
301 );
302 INSERT INTO goalinplan values (
303     (SELECT id FROM goal WHERE name='Conquer
           the world'),
304     (SELECT id FROM plans WHERE ownerid=(SELECT
           id FROM people WHERE name='Floyd') AND
           statusid=(SELECT id FROM statuses WHERE
           name='failed'))
305 );
306
307 INSERT INTO support values (
308     (SELECT id FROM people WHERE name='Floyd'),
309     (SELECT plans.id FROM plans WHERE
           ownerid=(SELECT people.id FROM people WHERE
           name='Anna') AND statusid=(SELECT
           statuses.id FROM statuses WHERE
           name='paused')),
310     100
311 );
312 INSERT INTO support values (
313     (SELECT id FROM people WHERE name='Floyd'),
314     (SELECT id FROM plans WHERE ownerid=(SELECT id
           FROM people WHERE name='Halvorsen') AND
           statusid=(SELECT id FROM statuses WHERE
           name='done')),
315     -300
316 );
317 INSERT INTO support values (
318     (SELECT id FROM people WHERE name='Floyd'),
319     (SELECT id FROM plans WHERE ownerid=(SELECT id
           FROM people WHERE name='Sirenis') AND

```

```

320         statusid=(SELECT id FROM statuses WHERE
321         name='failed')),
322     200
323 );
324 INSERT INTO support values (
325     (SELECT id FROM people WHERE name='Anna'),
326     (SELECT id FROM plans WHERE ownerid=(SELECT id
327     FROM people WHERE name='Halvorsen') AND
328     statusid=(SELECT id FROM statuses WHERE
329     name='done')),
330     50
331 );
332 INSERT INTO support values (
333     (SELECT id FROM people WHERE name='Anna'),
334     (SELECT id FROM plans WHERE ownerid=(SELECT id
335     FROM people WHERE name='Sirenis') AND
336     statusid=(SELECT id FROM statuses WHERE
337     name='failed')),
338     200
339 );
340 INSERT INTO support values (
341     (SELECT id FROM people WHERE name='Anna'),
342     (SELECT id FROM plans WHERE ownerid=(SELECT id
343     FROM people WHERE name='Floyd') AND
344     statusid=(SELECT id FROM statuses WHERE
345     name='failed')),
346     100
347 );
348 INSERT INTO support values (
349     (SELECT id FROM people WHERE name='Halvorsen'),
350     (SELECT id FROM plans WHERE ownerid=(SELECT id
351     FROM people WHERE name='Sirenis') AND
352     statusid=(SELECT id FROM statuses WHERE
353     name='failed')),
354     200
355 );
356 INSERT INTO support values (
357     (SELECT id FROM people WHERE name='Halvorsen'),
358     (SELECT id FROM plans WHERE ownerid=(SELECT id
359     FROM people WHERE name='Floyd') AND
360     statusid=(SELECT id FROM statuses WHERE
361     name='failed')),
362     -100
363 );
364 INSERT INTO support values (
365     (SELECT id FROM people WHERE name='Sirenis'),
366     (SELECT id FROM plans WHERE ownerid=(SELECT id
367     FROM people WHERE name='Anna') AND
368     statusid=(SELECT id FROM statuses WHERE
369     name='paused')),
370     -100
371 );

```

351	100
352	);

## 7 Вывод

В ходе выполнения лабораторной работы были изучены сущности и их классификация, инфологическая модель, даталогическая модель, основы PostgreSQL.