

1. Создаем таблицу через скрипты

```
1 CREATE TABLE group_ (  
2 id INTEGER PRIMARY KEY,  
3 name VARCHAR(255) NOT NULL UNIQUE,  
4 description VARCHAR(255));  
5  
6  
7 CREATE TABLE student (  
8 id INTEGER PRIMARY KEY,  
9 name VARCHAR(255),  
10 group_id INTEGER REFERENCES student_group (id) NOT NULL);  
11  
12 CREATE TABLE student_marks (  
13 student_id INTEGER REFERENCES student (id),  
14 math_mark_average FLOAT,  
15 physics_mark_average FLOAT,  
16 python_mark_average FLOAT);
```

2. Заполняем данными

```
1 INSERT INTO group_ (id, name, description) VALUES (1, 'bpi2401', 'best group');  
2 INSERT INTO group_ (id, name, description) VALUES (2, 'bpi2402', 'not best group');  
3  
4 INSERT INTO student (id, name, group_id) VALUES (1, 'Ivan', 1);  
5 INSERT INTO student (id, name, group_id) VALUES (2, 'Vova', 1);  
6 INSERT INTO student (id, name, group_id) VALUES (3, 'Sergey', 1);  
7  
8 INSERT INTO student (id, name, group_id) VALUES (4, 'Alexey', 2);  
9 INSERT INTO student (id, name, group_id) VALUES (5, 'Viktor', 2);  
10 INSERT INTO student (id, name, group_id) VALUES (6, 'Egor', 2);  
11  
12 INSERT INTO student_marks VALUES (1, 5, 5, 5);  
13 INSERT INTO student_marks VALUES (2, 5, 4.8, 4.9);  
14 INSERT INTO student_marks VALUES (3, 4.9, 4.9, 4.9);  
15  
16 INSERT INTO student_marks VALUES (4, 3, 3, 3);  
17 INSERT INTO student_marks VALUES (5, 3.3, 3.3, 3.3);  
18 INSERT INTO student_marks VALUES (6, 2, 2, 2);
```

3. Запросы с фильтрацией

```
1 SELECT * FROM group_
```

| id | name | description |
|----|---------|----------------|
| 1 | bpi2401 | best group |
| 2 | bpi2402 | not best group |

```
1 SELECT * FROM student
2 WHERE group_id = 1;
```

| id | name | group_id |
|----|--------|----------|
| 1 | Ivan | 1 |
| 2 | Vova | 1 |
| 3 | Sergey | 1 |

```
1 SELECT * FROM student_marks
2 WHERE math_mark_average = 5;
```

| student_id | math_mark_a... | physics_mar... | python_mark_aver... |
|------------|----------------|----------------|---------------------|
| 1 | 5 | 5 | 5 |
| 2 | 5 | 4.8 | 4.9 |