

```
~  
➔ psql --version  
psql (PostgreSQL) 16.9 (Ubuntu 16.9-0ubuntu0.24.04.1)  
➔ █
```

```
~  
lab1db=# \dt  
                List of relations  
 Schema | Name   | Type  | Owner  
-----+-----+-----+-----  
 public | student | table | postgres  
(1 row)  
  
lab1db=# █
```

```
~  
➔ psql -U postgres  
psql (16.9 (Ubuntu 16.9-0ubuntu0.24.04.1))  
Type "help" for help.  
  
postgres=# \c lab1db  
You are now connected to database "lab1db" as user "postgres".  
lab1db=# SELECT * FROM Student;  
 studentid | name   | major  
-----+-----+-----  
          1 | Braeden | Computing  
          2 | Mitch  | Computing  
(2 rows)  
  
lab1db=# █
```

**What is the schema of relation Student?**

The Student schema is:

StudentID     INT

Name           VARCHAR(50)

Major VARCHAR(50)

**What is an instance of a relation?**

One of the instances of the relation is me, Braeden, with StudentID 1 and a major of Computing.

**Which attribute is the primary key?**

StudentID INT is the primary key.

**Name one advantage a relational table has over a spreadsheet for this data.**

An advantage, especially with the stretch goals is being able to link together tables such as Student, Course, and Enrollment. This is because relational tables allow us to have primary keys that make sure rows are uniquely identifiable and we can use those primary keys as foreign keys as reference in other tables.

```
lab1db=# SELECT s.Name, c.Title, e.Grade FROM STUDENT s JOIN Enrollment e ON e.StudentID = s.StudentID JOIN Course c ON c.CourseID = e.CourseID;
 name | title | grade
-----+-----+-----
 Braeden | Procedural Programming | A
 Braeden | Object Oriented Programming | B
 Mitch | Procedural Programming | F
 Mitch | Object Oriented Programming | D
(4 rows)

lab1db=#
```

very cool