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Step 1:

Create a database called “student” in pgAdmin4

Step 2:

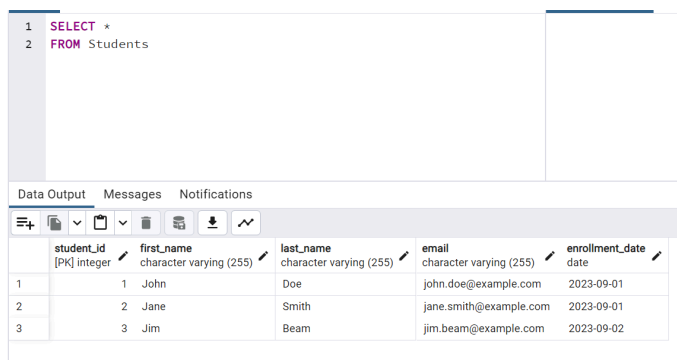
Create a new table using this create statement:

```
CREATE TABLE Students(  
    student_id SERIAL PRIMARY KEY,  
    first_name VARCHAR(255) NOT NULL,  
    last_name VARCHAR(255) NOT NULL,  
    email VARCHAR(255) NOT NULL UNIQUE,  
    enrollment_date DATE  
);
```

Step 3:

Add base values for testing

```
INSERT INTO students (first_name, last_name, email, enrollment_date) VALUES  
('John', 'Doe', 'john.doe@example.com', '2023-09-01'),  
('Jane', 'Smith', 'jane.smith@example.com', '2023-09-01'),  
('Jim', 'Beam', 'jim.beam@example.com', '2023-09-02');
```

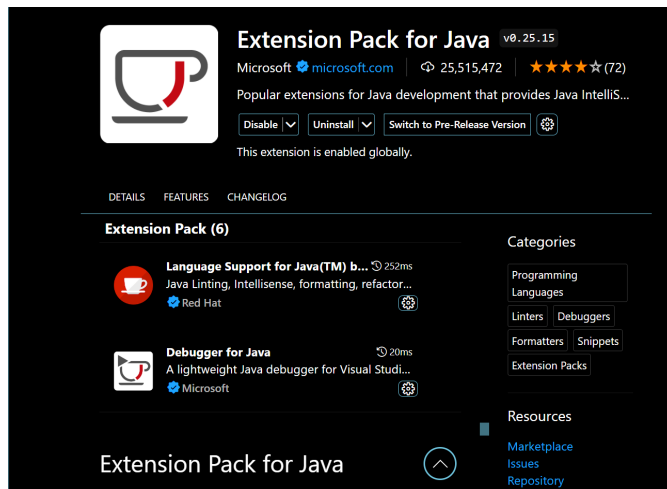


The screenshot shows the pgAdmin4 interface. The top pane contains a SQL query: `SELECT * FROM Students`. The bottom pane, titled "Data Output", displays the results of the query in a table format. The table has five columns: `student_id` (integer, primary key), `first_name` (character varying (255)), `last_name` (character varying (255)), `email` (character varying (255)), and `enrollment_date` (date). There are three rows of data.

	student_id [PK] integer	first_name character varying (255)	last_name character varying (255)	email character varying (255)	enrollment_date date
1	1	John	Doe	john.doe@example.com	2023-09-01
2	2	Jane	Smith	jane.smith@example.com	2023-09-01
3	3	Jim	Beam	jim.beam@example.com	2023-09-02

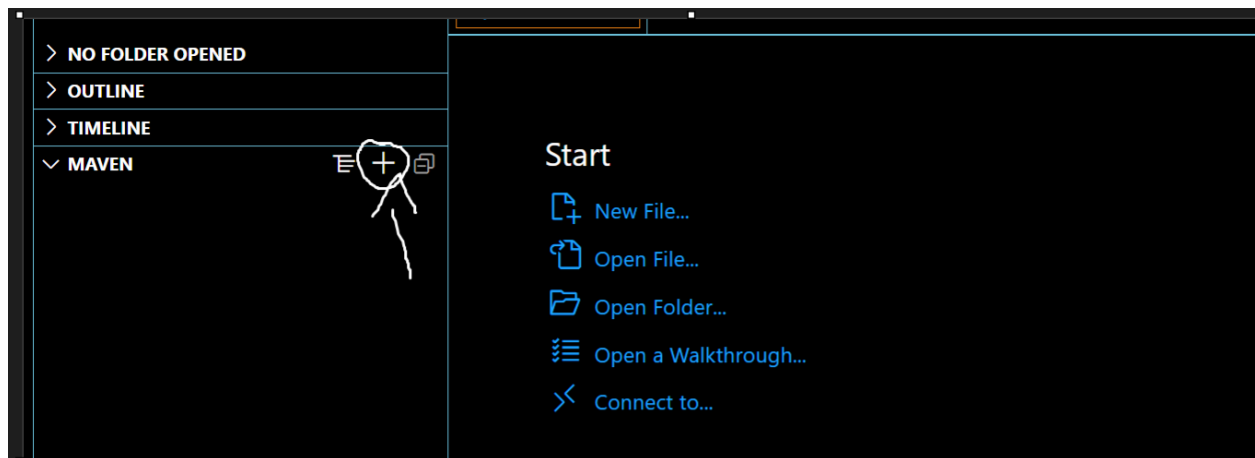
Step 4:

In VSCode, download the extension called “Extension Pack for Java”



Step 5:

Open VSCode and on the left side



Create a new maven project

Click on “maven-archetype-quickstart”

Then on “1.4”

Pick whatever name for artifact Id

Pick a directory

For where it say “Define value for property 'version' 1.0-SNAPSHOT:”, enter “1.0” and then for where is say “Y:” enter “y”

Step 6:

In the pom.xml file, add the following between “<dependencies>” and “</dependencies>”
If its doesnt exist, write it yourself

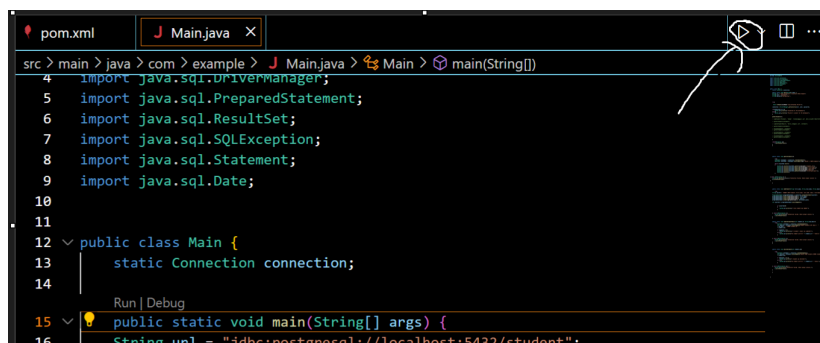
```
<dependency>
    <groupId>org.postgresql</groupId>
    <artifactId>postgresql</artifactId>
    <version>42.7.2</version>
</dependency>
```

Note: this dependency works for Java 8. Dependency for other versions can be found here [Home | pgJDBC \(postgresql.org\)](https://jdbc.postgresql.org/).

Don't need to download, you can just copy Maven.

Step 7:

Then to run the code, you can call any of the functions in the main with the correct parameters and run the code to see the results. There are also some tester functions that could be uncommented in main to test.
The results should also show in the database



Username and password should be changed to whatever you use to sign in on your postgres

Youtube link:

<https://youtu.be/aa9zShd-HfE>