

Step1: Check postgresql

Open in Terminal

Su postgres;

psql;

```
postgres=# CREATE USER root WITH PASSWORD '12345';  
CREATE ROLE
```

```
postgres=# create database collegejava;
```

```
CREATE DATABASE
```

```
postgres=# \c collegejava
```

```
collegejava=# create table student(rollno int,name varchar(20),class varchar(20));
```

```
CREATE TABLE
```

```
collegejava=# insert into student values(1,'dipali','ty');
```

```
INSERT 0 1
```

step 2: Install Java (if not installed)

Check if Java is installed:

```
java -version
```

If not installed, install OpenJDK:

```
sudo dnf install java-11-openjdk-devel
```

Verify installation:

```
java -version
```

Step 3: Download PostgreSQL JDBC Driver

1. Download the latest `.jar` file (e.g., `postgresql-42.6.0.jar`) to your CentOS system. You can use link

```
wget https://jdbc.postgresql.org/download/postgresql-42.6.0.jar -P  
/usr/local/lib/
```

Here `/usr/local/lib/` is just an example location.

Step 4: Verify the JAR is Accessible

You can check if the JAR is accessible by running:

```
javac -cp usr/local/lib/postgresql-42.6.0.jar TestJDBC.java
```

Replace `TestJDBC.java` with your Java file that uses PostgreSQL.

Set Class Path

vim ~/.bashrc

Source ~/.bashrc

Press i for insert

Copy path of jar file at the end next to export keyword

```
export CLASSPATH=$CLASSPATH:../usr/local/lib/postgresql-42.6.0.jar
```

Save and exit

Run file using command

```
source ~/.bashrc
```

Step 5: Sample Java Code to Test Connection

Open location `/usr/local/lib/`

Open terminal and

Write this program

Here's a small Java example to test:

```
import java.sql.Connection;
import java.sql.DriverManager;

public class TestJDBC {
    public static void main(String[] args) {
```

```
        try {
            Class.forName("org.postgresql.Driver");
            //Connection con = DriverManager.getConnection(
                "jdbc:postgresql://localhost:5432/yourDB", "username",
"password");

            Connection con = DriverManager.getConnection(
                "jdbc:postgresql://localhost:5432/collegejava", "root",
"12345");

            System.out.println("Connection Successful!");
            con.close();
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

Compile and run:

```
javac TestJDBC.java
java TestJDBC
```

Or If Class Path is not set

```
javac -cp /usr/local/lib/postgresql-42.6.0.jar TestJDBC.java
java -cp ./usr/local/lib/postgresql-42.6.0.jar TestJDBC
```

If everything is correct, you'll see:

```
Connection Successful!
```