

## Troubleshooting 'Permission Denied' in psql:

I was attempting to run an sql file as user postgres using psql to create tables and import csvs into a database but it didn't work because permission was denied.

### **Solution:**

Right away I knew this was a permissions issue, but I missed a crucial step. I gave all permissions to the repository and its children, but I didn't remember to give permission to its parent directories. Postgres had all permissions to 'home/srodier/repos/jugos\_rodier' and 'home' but it didn't have access to 'home/srodier/', so it couldn't access the repository I needed.

In the end, I discovered this by using the cd command as user postgres to discover where the permissions ended and began.

### **More information:**

A user needs at least execute privileges to be able to access child directories and what is in them.

### **Other things I tried:**

All of these things would have worked, had I remembered to grant execute access to the necessary parent directories:

I transferred group ownership of the file jugos\_rodier to postgres. I did this using the following command:

```
chmod -R g+rx repos
```

This grants read,write, and execute privileges to the directory repos and its children

```
chgrp -R postgres repos
```

This transfers ownership of the repository repos (and its children) to the group postgres. This does NOT change primary ownership of the directory. Since the repos directory was created by user 'srodier', srodier is the primary owner of the directory and can determine who has access to it.

Again, this would have worked had I granted postgres at least execute access to its parent directories.

I also tried granting permission to all users with:

```
chmod a+rx repos.
```

This didn't return any errors and obviously wasn't wrong, but again, I didn't grant access to its parent directories.

I also changed ownership of the repos directory using:

```
sudo chown -R postgres repos
```

In the end, I returned the permissions to how they originally were except that user postgres has rx access to the repos directory and its children and execute privilege for the home and srodier directories.