**Setup local database**

1. Go to <https://www.postgresql.org> download the PostgreSQL
2. Go to <https://postgresapp.com/downloads.html> download the Postgres app
3. Inside the Postgres App, click initialize, you can see all local database you have right now
4. Go to <https://www.jetbrains.com/datagrip/> download DataGrip, as a student you can register a free account. It is the database GUI you can interact with your local database.
5. Open Postgres App, click any one of database showing here, it will open a terminal to show the path of your local PostgreSQL. We will need this PATH info to setup your computer.
6. Open your terminal, first check whether you are using zsh or bash
   1. If you are using bash, this tutorial is using zsh to setup, so this the time for you to explore zsh
   2. If you don’t want to use zsh, simply type “vi .bash\_profile” in terminal you can go to step 8
   3. If you want to use zsh, you can go to <https://ohmyz.sh> to install zsh.
   4. After you have installed, you can type “chsh -s /bin/zsh” in your command shell to change the default shell to zsh. If you want to change back to bash, just type ”chsh -s /bin/bash”.
   5. Now suppose you have download all things and using zsh right now
7. In your terminal, type “vi .zshrc” to setup (if you are using bash, skip it, you have already opened it)
8. Add a new line to your zshrc: “export PATH=$PATH:/Applications/Postgres.app/Contents/Versions/12/bin”. The underlined part is the PATH you seen in step 5 and delete the last”/pgsql/”. Try to find this similar path in your step 5 (Maybe your version number or absolute path is little different from mine, but in general is similar).
9. Type “:wq” to save and exit vim, then type “source .zshrc” in your terminal
10. Next type psql to open your database server.
11. Let create a new database in your computer
12. For now you should have seen “[name of your computer] =#” in your terminal, after that, type “CREATE DATABASE” and the name of your database you want. For example, I type “CREATE DATABASE c4gwebsite;” (Be careful of the last semicolon) My example database name is c4gwebsite. After enter, you will see it prompt “CREATE DATABASE” info. Now you can type “\l” to check all database you have right now.
13. Type “\q” to quit psql and type “psql --help” in your terminal to check all help info. It will tell you all options about psql.
14. Pay attention to: 1. database server host or socket directory 2. database server port (default: "5432”), 3.database user name
15. Now you can enter your created database by typing “psql c4gwebsite” in your terminal. Or you can first enter the psql, then after “#” type “\c c4gwebsite” to enter.
16. Download our “createtable.sql”, save it in your computer and use “pwd” to know the path of this document in your computer. For example, I download my file to my Downloads director, so my path is “/Users/jay/Downloads”. Copy this path, we call this PATH in next step.
17. In your psql, suppose now you have entered your database, mine is c4gwebsite. So now it shows “c4gwebsite=# “. After that, enter “\i PATH\createtable.sq” and press enter. (PATH is the absolute path showing in STEP 16, replace it with your document path). Now you have create all needed tables in your computer.

Now, you have set up the postgreSQL in your local computer and create all needed table

Next, we try to connect your local database with your DataGrip