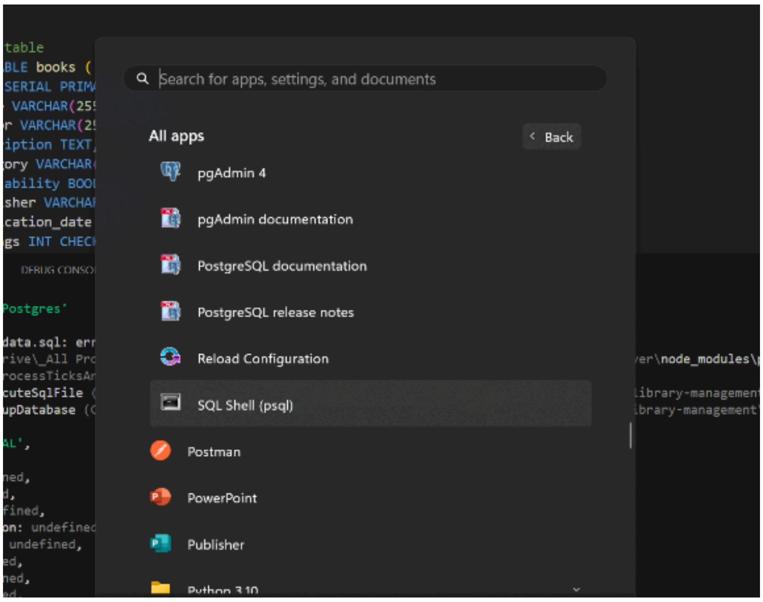
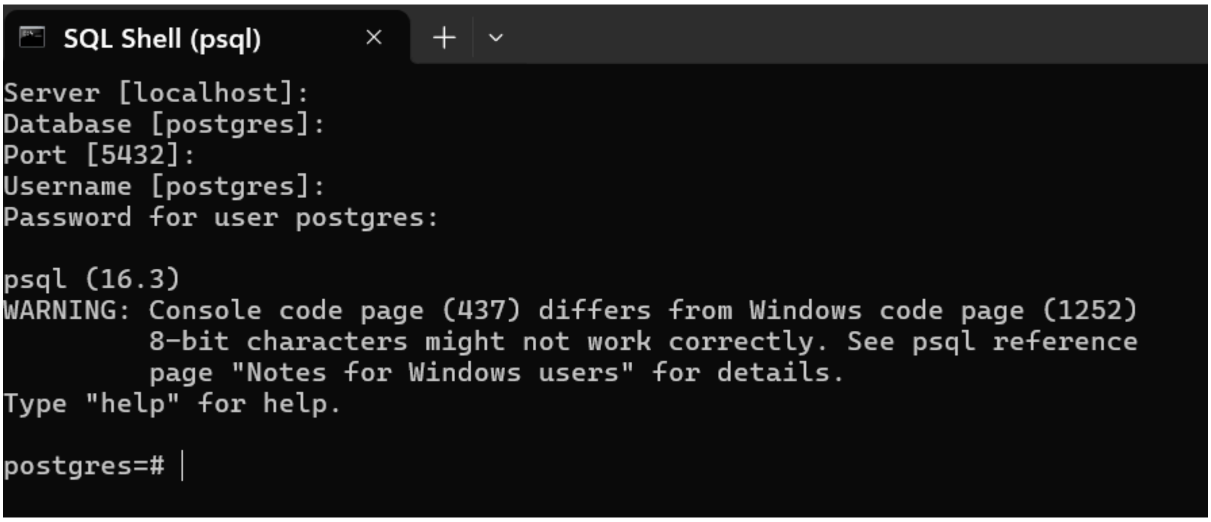
Installations :

1. VSCode
2. PostgreSQL (remember the password for 'postgres' user)

STEP 1: Open SQL shell (psql)

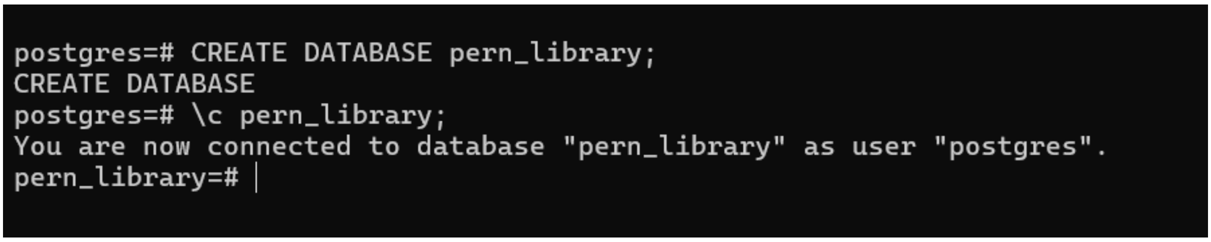


STEP 2:Hit enter for every step, for password Enter the Postgres password and then hit enter.It should look something like below when the postgres will be set up.



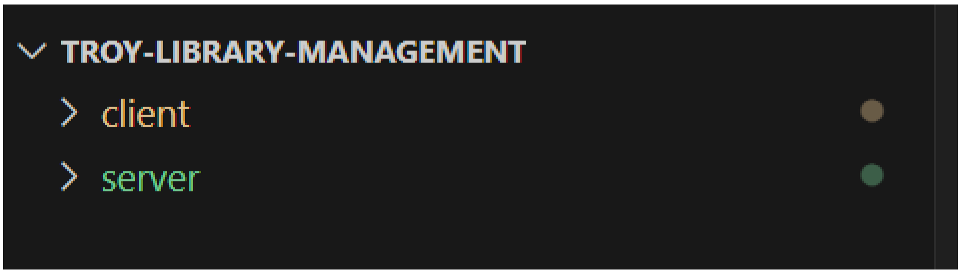
```
Server [localhost]:
Database [postgres]:
Port [5432]:
Username [postgres]:
Password for user postgres:

psql (16.3)
WARNING: Console code page (437) differs from Windows code page (1252)
         8-bit characters might not work correctly. See psql reference
         page "Notes for Windows users" for details.
Type "help" for help.

postgres=#
```

STEP 3:Now enter these 2 commands
i) CREATE DATABASE pern_library
ii) \c pern_library;



```
postgres=# CREATE DATABASE pern_library;
CREATE DATABASE
postgres=# \c pern_library;
You are now connected to database "pern_library" as user "postgres".
pern_library=#
```

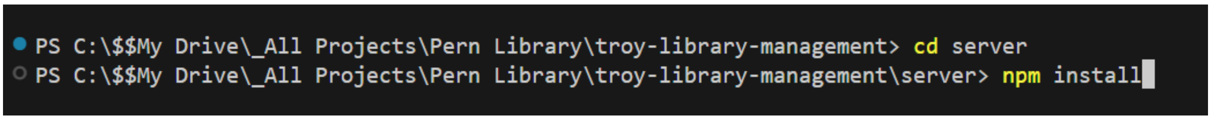
STEP 4: Open the unzipped code folder (troy-library-management) in VSCode. You should see these two folders (client and server)



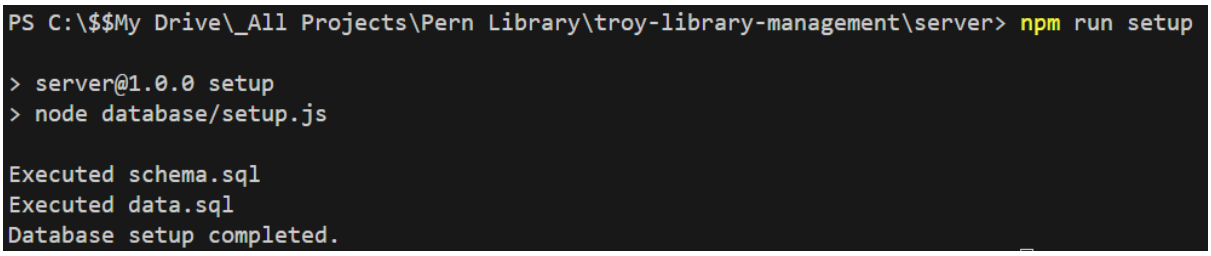
STEP 5: Navigate to the server's database folder and open the setup.js file. Update the password field on line 9 with your PostgreSQL password for secure database connection.

STEP 6: Open terminal for SERVER

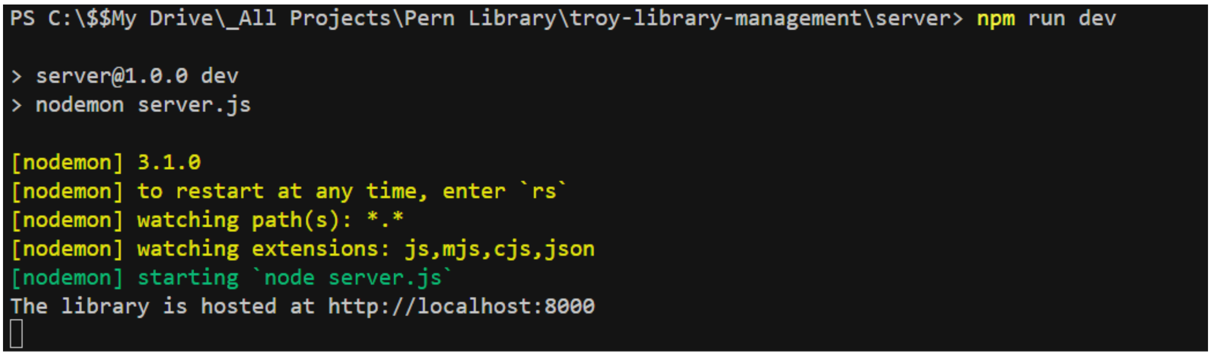
i) Change directory to server, by cd server command.
ii) Install dependencies, by npm install command.
iii) Run the command, npm run setup
iv) Run the command, npm run dev (server has started)



```
PS C:\$$My Drive\_All Projects\Pern Library\troy-library-management> cd server
PS C:\$$My Drive\_All Projects\Pern Library\troy-library-management\server> npm install
```



```
PS C:\$$My Drive\_All Projects\Pern Library\troy-library-management\server> npm run setup

> server@1.0.0 setup
> node database/setup.js

Executed schema.sql
Executed data.sql
Database setup completed.
```



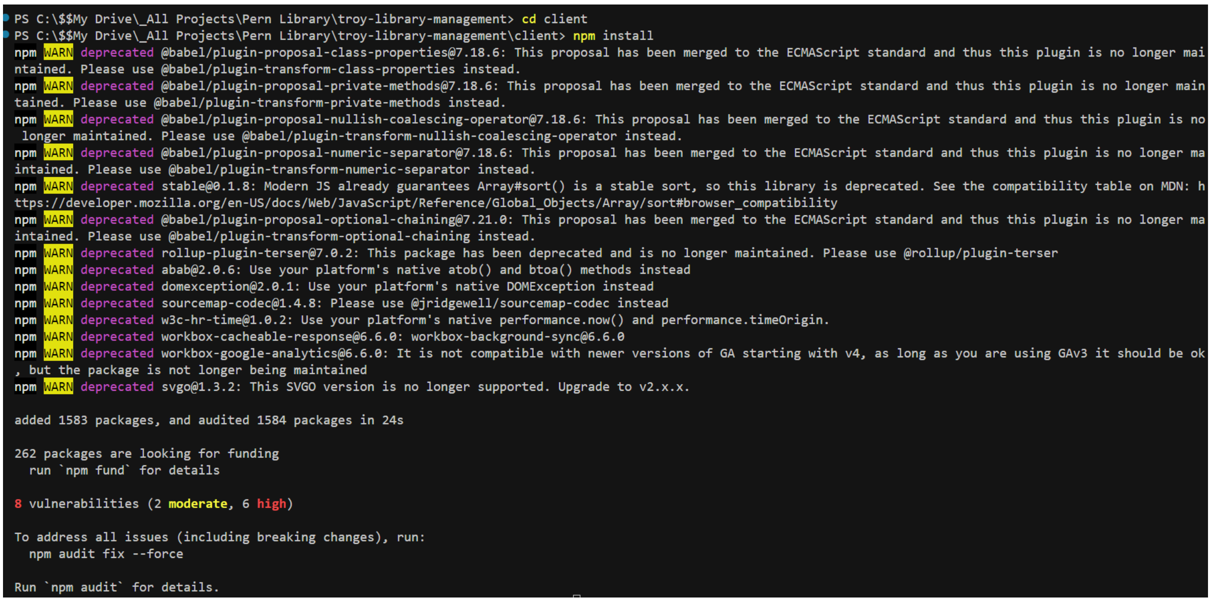
```
PS C:\$$My Drive\_All Projects\Pern Library\troy-library-management\server> npm run dev

> server@1.0.0 dev
> nodemon server.js

[nodemon] 3.1.0
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node server.js`
The library is hosted at http://localhost:8000
```

STEP 7: Open new terminal for CLIENT

i) Change directory to server, by cd client command.

ii) Install dependencies, by npm install command.

iii) Run the command, npm start



```
PS C:\$$My Drive\_All Projects\Pern Library\troy-library-management> cd client
PS C:\$$My Drive\_All Projects\Pern Library\troy-library-management\client> npm install
npm WARN deprecated @babel/plugin-proposal-class-properties@7.18.6: This proposal has been merged to the ECMAScript standard and thus this plugin is no longer mai
ntained. Please use @babel/plugin-transform-class-properties instead.
npm WARN deprecated @babel/plugin-proposal-private-methods@7.18.6: This proposal has been merged to the ECMAScript standard and thus this plugin is no longer main
tained. Please use @babel/plugin-transform-private-methods instead.
npm WARN deprecated @babel/plugin-proposal-nullish-coalescing-operator@7.18.6: This proposal has been merged to the ECMAScript standard and thus this plugin is no
 longer maintained. Please use @babel/plugin-transform-nullish-coalescing-operator instead.
npm WARN deprecated @babel/plugin-proposal-numeric-separator@7.18.6: This proposal has been merged to the ECMAScript standard and thus this plugin is no longer ma
intained. Please use @babel/plugin-transform-numeric-separator instead.
npm WARN deprecated stable@0.1.8: Modern JS already guarantees Array#sort() is a stable sort, so this library is deprecated. See the compatibility table on MDN: h
ttps://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Array/sort#browser_compatibility
npm WARN deprecated @babel/plugin-proposal-optional-chaining@7.21.0: This proposal has been merged to the ECMAScript standard and thus this plugin is no longer ma
intained. Please use @babel/plugin-transform-optional-chaining instead.
npm WARN deprecated rollup-plugin-terser@7.0.2: This package has been deprecated and is no longer maintained. Please use @rollup/plugin-terser
npm WARN deprecated abab@2.0.6: Use your platform's native atob() and btoa() methods instead
npm WARN deprecated domexception@2.0.1: Use your platform's native DOMException instead
npm WARN deprecated sourcemap-codec@1.4.8: Please use @jridgewell/sourcemap-codec instead
npm WARN deprecated w3c-hr-time@1.0.2: Use your platform's native performance.now() and performance.timeOrigin.
npm WARN deprecated workbox-cacheable-response@6.6.0: workbox-background-sync@6.6.0
npm WARN deprecated workbox-google-analytics@6.6.0: It is not compatible with newer versions of GA starting with v4, as long as you are using GAv3 it should be ok
, but the package is not longer being maintained
npm WARN deprecated svgo@1.3.2: This SVGO version is no longer supported. Upgrade to v2.x.x.

added 1583 packages, and audited 1584 packages in 24s

262 packages are looking for funding
  run `npm fund` for details

8 vulnerabilities (2 moderate, 6 high)

To address all issues (including breaking changes), run:
  npm audit fix --force

Run `npm audit` for details.
```

Step 8: There are 3 users.

1 Librarian: Email ID: librarian@gmail.com
Password: 123456

2 Students : Email ID: mitil@gmail.com
Password: Mitil@123

Email ID: dave@gmail.com
Password: Dave@123