Instructions to Run Week 3 Lab task:

Step 1: Set Up Environment:

Ensure you've set up your TypeScript environment by installing Node.js, TypeScript, and Visual Studio Code as described earlier.

Step 2: Create a TypeScript File

Open Visual Studio Code.
Create a new file in your project directory and name it something like virtualPets.ts.

Step 3: Copy and Paste Code

Copy the provided TypeScript code.
Paste the code into the virtualPets.ts file you created.

Step 4: Open Integrated Terminal in Visual Studio Code

In Visual Studio Code, open the integrated terminal by clicking on "View" in the top menu and selecting "Terminal" from the dropdown.
The terminal will open at the bottom of the VSCode window.

Step 5: Transpile TypeScript Code

In the terminal, navigate to the directory where your virtualPets.ts file is located using the cd command.
Once you're in the directory with your TypeScript file, run the following command to transpile the TypeScript code into JavaScript:

```
tsc virtualPets.ts
```

This will create a virtualPets.js file in the same directory.

Step 6: Run the JavaScript Code

In the terminal, still within the same directory, run the following command to execute the JavaScript code:

```
node virtualPets.js
```

This will execute your virtual pet simulation and display the output in the terminal.

Step 7: Observe the Output

After running the program, you'll see a series of outputs related to virtual pets, their interactions, feeding, playing, and updated details.

By following these steps, you'll be able to run the provided TypeScript code in Visual Studio Code. The code defines classes for a generic Pet and subclasses for Dog and Cat pets. You'll see the interaction and behavior of the virtual pets in the terminal output.

Remember to have Node.js installed on your machine, transpile the TypeScript file (virtualPets.ts) to JavaScript (virtualPets.js) using the tsc command, and then run the JavaScript file using Node.js to see the program's output.