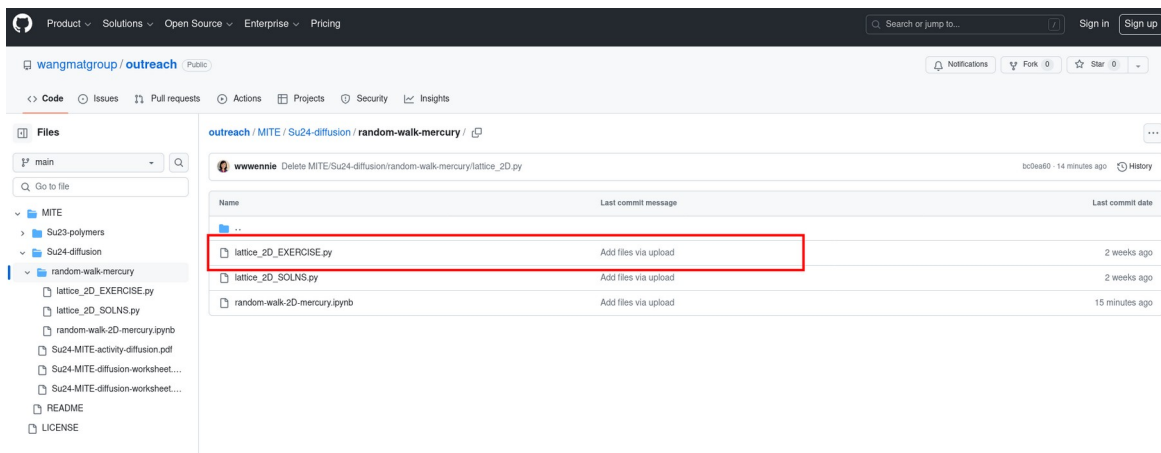


## Modifying the code

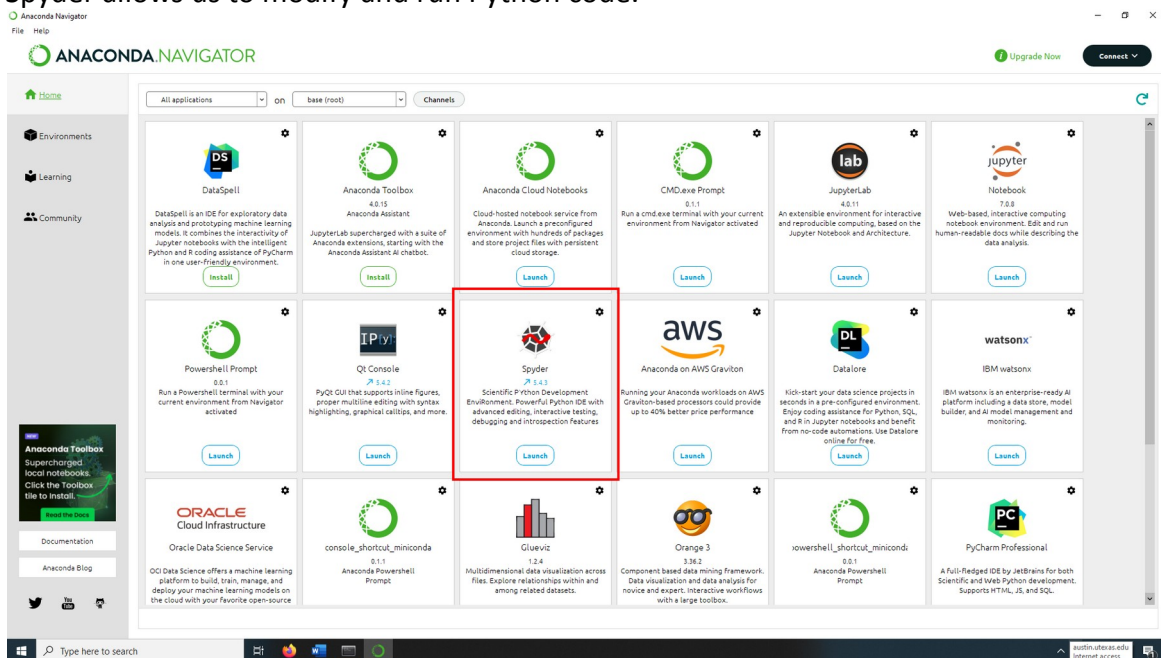
We will perform a small exercise to understand the code a little bit. In order to do so, we will work with the code for running a small simulation of random walk diffusion on a 2D lattice.

**Step 1:** Download the code `lattice_2D_EXERCISE.py` from our github page:

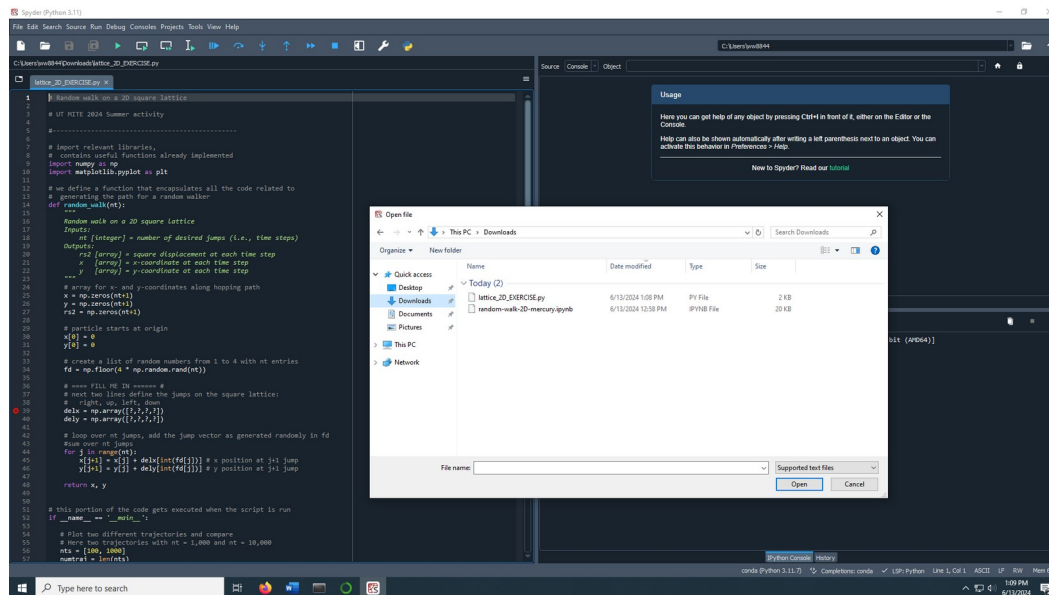
<https://github.com/wangmatgroup/outreach/tree/main/MITE/Su24-diffusion/random-walk-mercury>



**Step 2:** Open the Anaconda Navigator and launch the Spyder Application. Spyder is what is called an integrated development environment (IDE) for scientific programming in the Python language. In short, Spyder allows us to modify and run Python code.



**Step 3:** Open the file `lattice_2D_EXERCISE.py` in Spyder.



**Step 4:** Run the code in Spyder.

Press the sideways gree triangle to run the code.

Output from the code will appear in the area highlighted by the green box. At first you will get an error because the code is not complete!

Fill in the code and try running the code again. You should see a few plots in the Plots tab on the left.

