Temperature Control Device Set Up
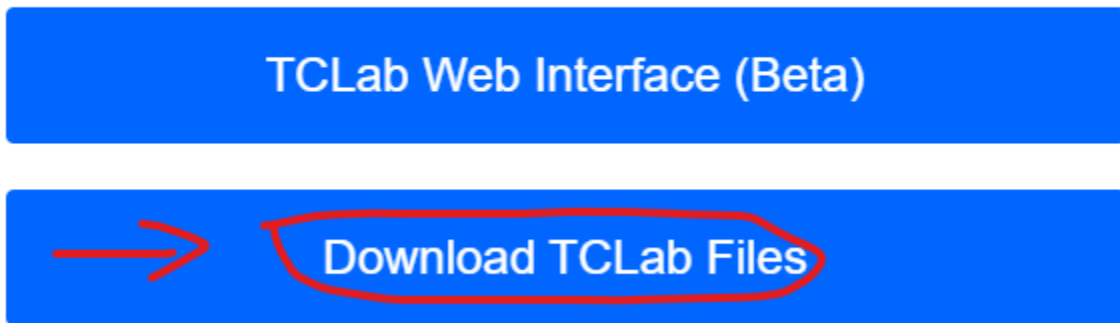
In order to get the Temperature Control device all set up, you will need two programs:

- Python
  - https://software.uconn.edu/software/?licenseSelect=Free+%26+Open-Source
- Arduino
  - https://www.arduino.cc/en/software

And, you will need to download the TCLab files found on their website:

https://apmonitor.com/pdc/index.php/Main/ArduinoTemperatureControl

Unzip the TCLab file and open up tclab_v2. There, you should find an Arduino file that will get your Arduino ready to run the lab files.

If you have any trouble setting up your Arduino, please follow the videos on this webpage: https://apmonitor.com/pdc/index.php/Main/ArduinoSetup
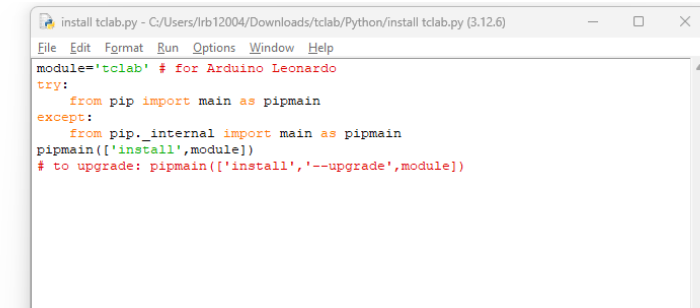
Be sure to check off Arduino Leonardo under the Tools tab.

Verify and run the program so the board is all set to run!

First, you'll need to set up the tclab package, through a new Python code. Using the code in that Arduino Setup page, create a new Python file and run it.

```
module='tclab' # for Arduino Leonardo
try:
    from pip import main as pipmain
except:
    from pip._internal import main as pipmain
pipmain(['install',module])
# to upgrade: pipmain(['install','--upgrade',module])
```


Next, we will need to make sure the computers have access to all the other Python packages used in this lab.

Go to your windows search bar and type in "CMD". With the command prompt window open, type in **py -m pip install numpy**

As well as: **py -m pip install matplotlib**

And: **py -m pip install TIME-python**

With that all set, you should be able to start running the Python test code.