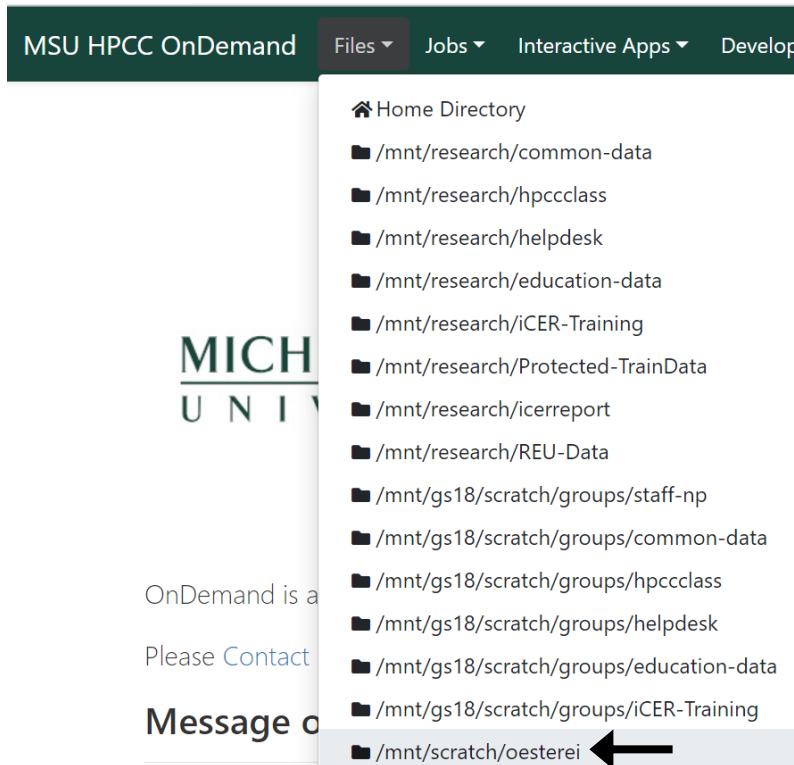
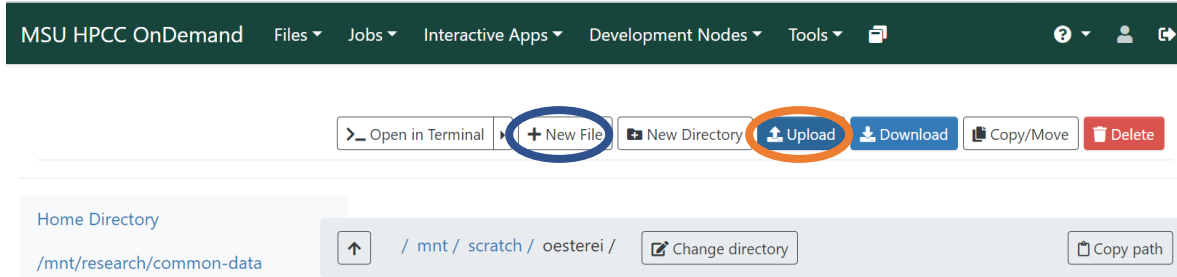


## Using OnDemand for Python Programming on the MSU HPC

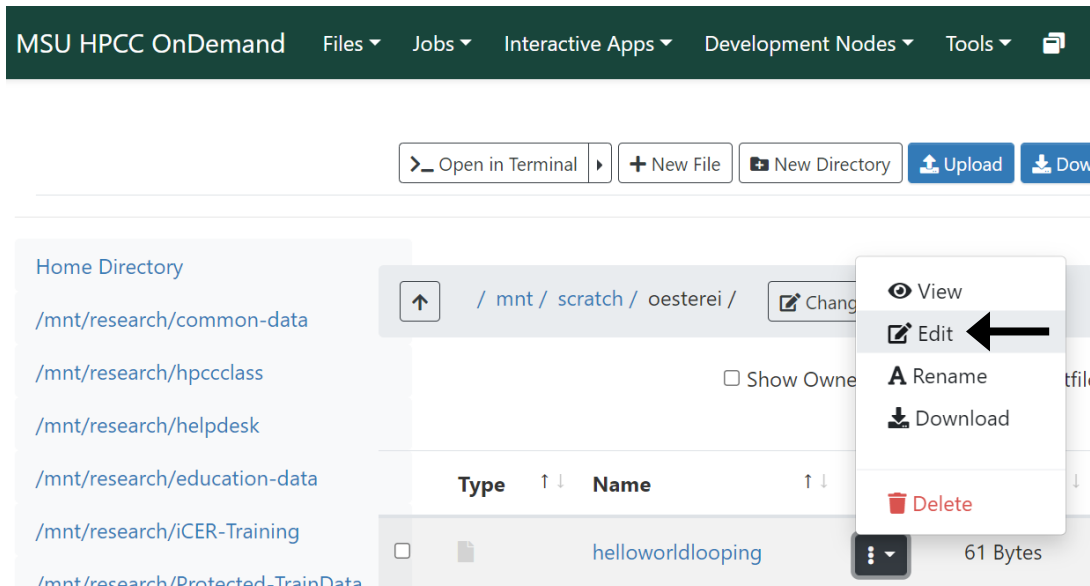
Log into MSU HPC OnDemand. Go to the Files dropdown menu and select the desired folder. For this example, the instructor's personal scratch folder was selected (/mnt/scratch/oesterei) but any directory should work. Details on MSU HPC structure, such as the difference between scratch and research folders, are in the [ICER HPC Resources and Concepts](#) D2L workshop. A link to self-enroll in this workshop can also be found in the "Recommended Future Training (optional)" module of this OnDemand D2L workshop.



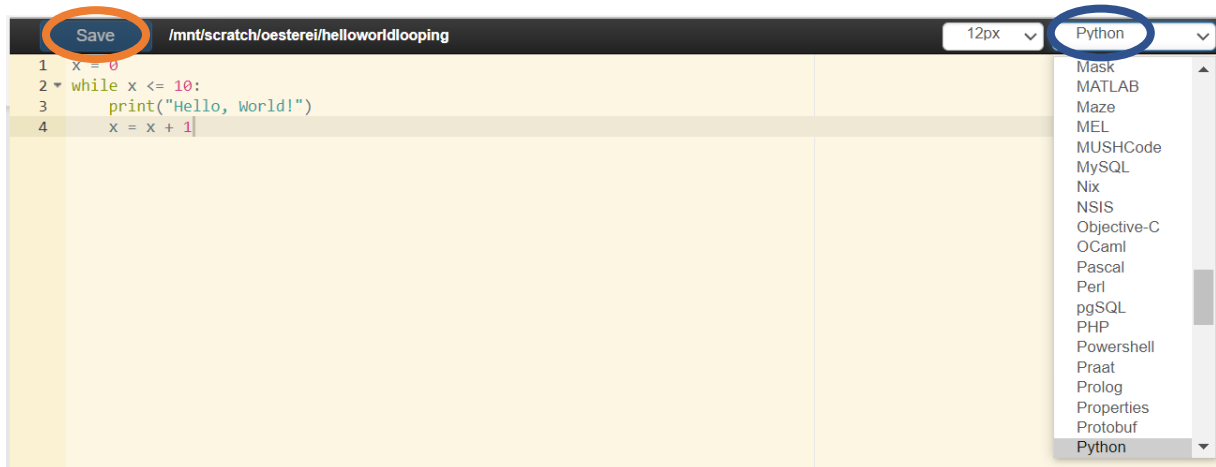
Upload your Python program file (.py) and any necessary input files in their proper format using the “Upload” button (orange circle below). Alternatively, you can create a new file using the “New File” button (blue circle below). You do not need to specify an extension to your file name, for example helloworldlooping.py, since OnDemand will use the programming language you specify (e.g., Python) to execute your file.



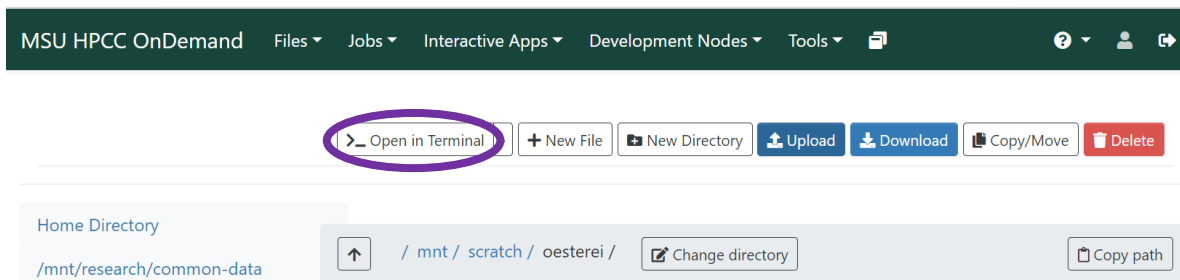
To edit the file, click on the downward-pointing arrow next to the three vertical dots for the appropriate file and select the “Edit” option (black arrow below).



To see in-text keyword highlights per specific programming languages, like Python, select the appropriate option from the language dropdown menu (blue circle below). Though not a requirement, this feature is helpful for programming directly on the MSU HPCC to eliminate the need for program file transfers. Do not forget to click “Save” (orange circle below) when your code is complete.



To execute your file, open a terminal with the “Open in Terminal” button (purple circle below).



This will bring you to a command line interface with the MSU HPC. To run your file, type “python” followed by a space and the file name.

