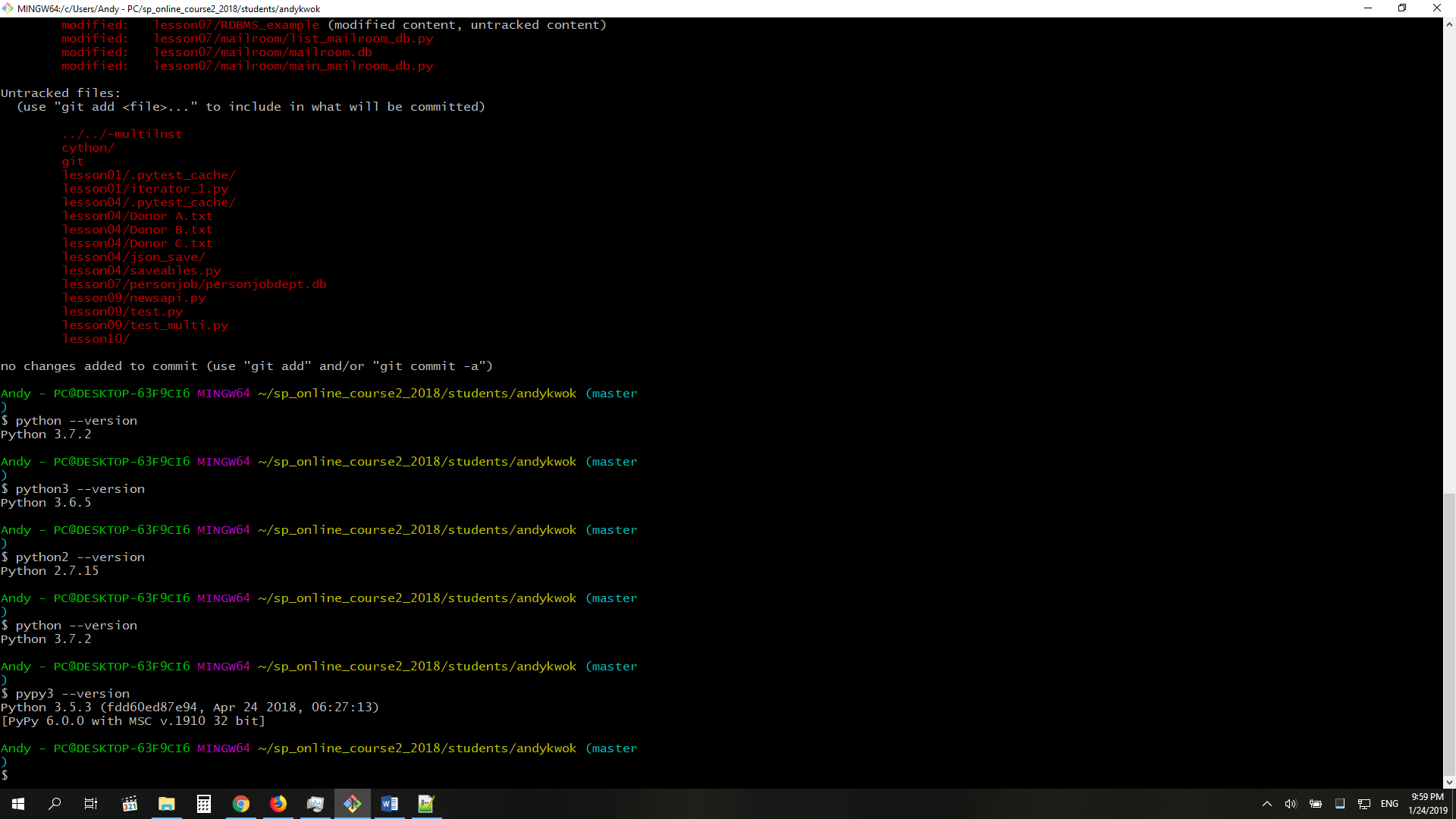
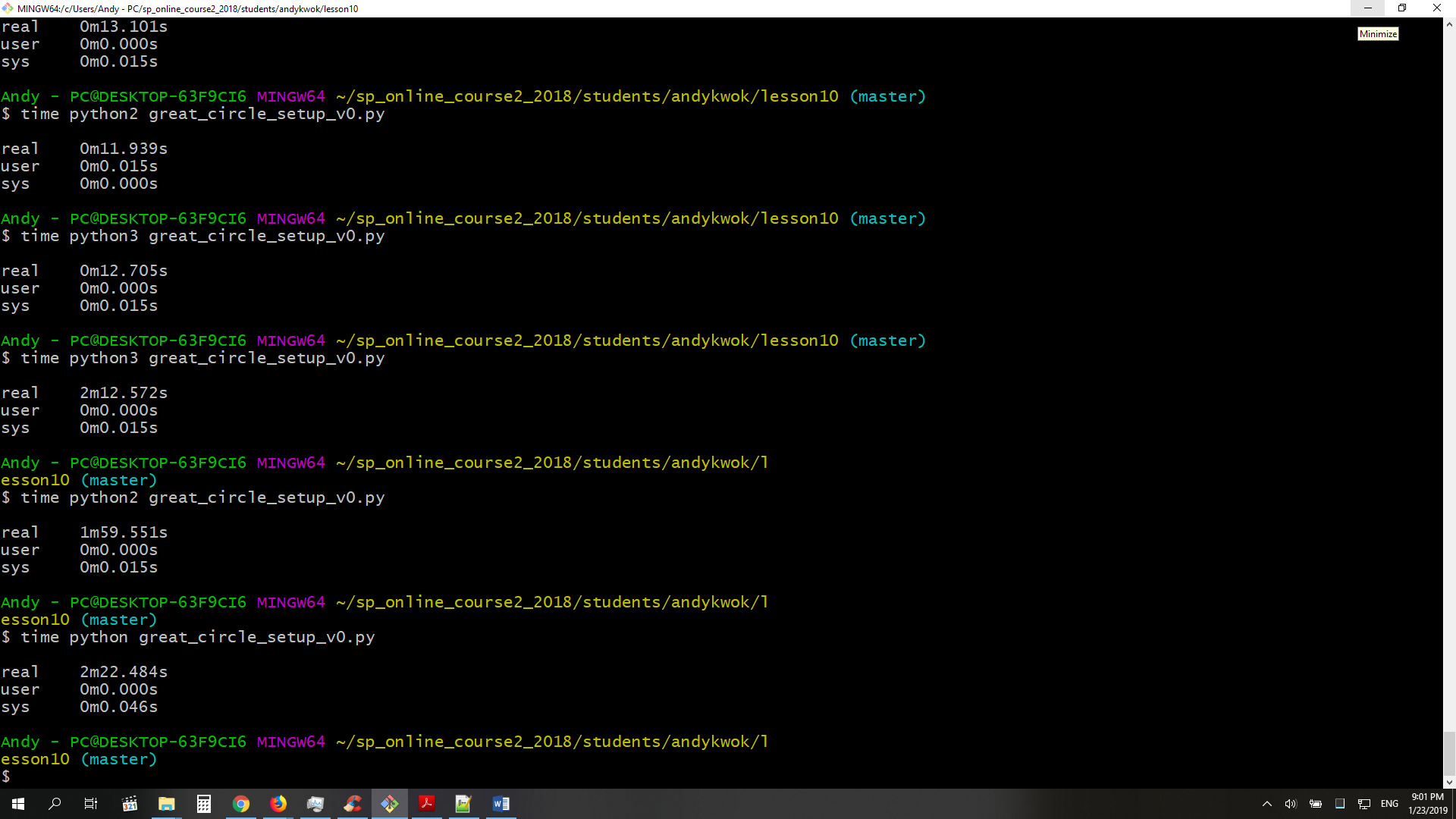
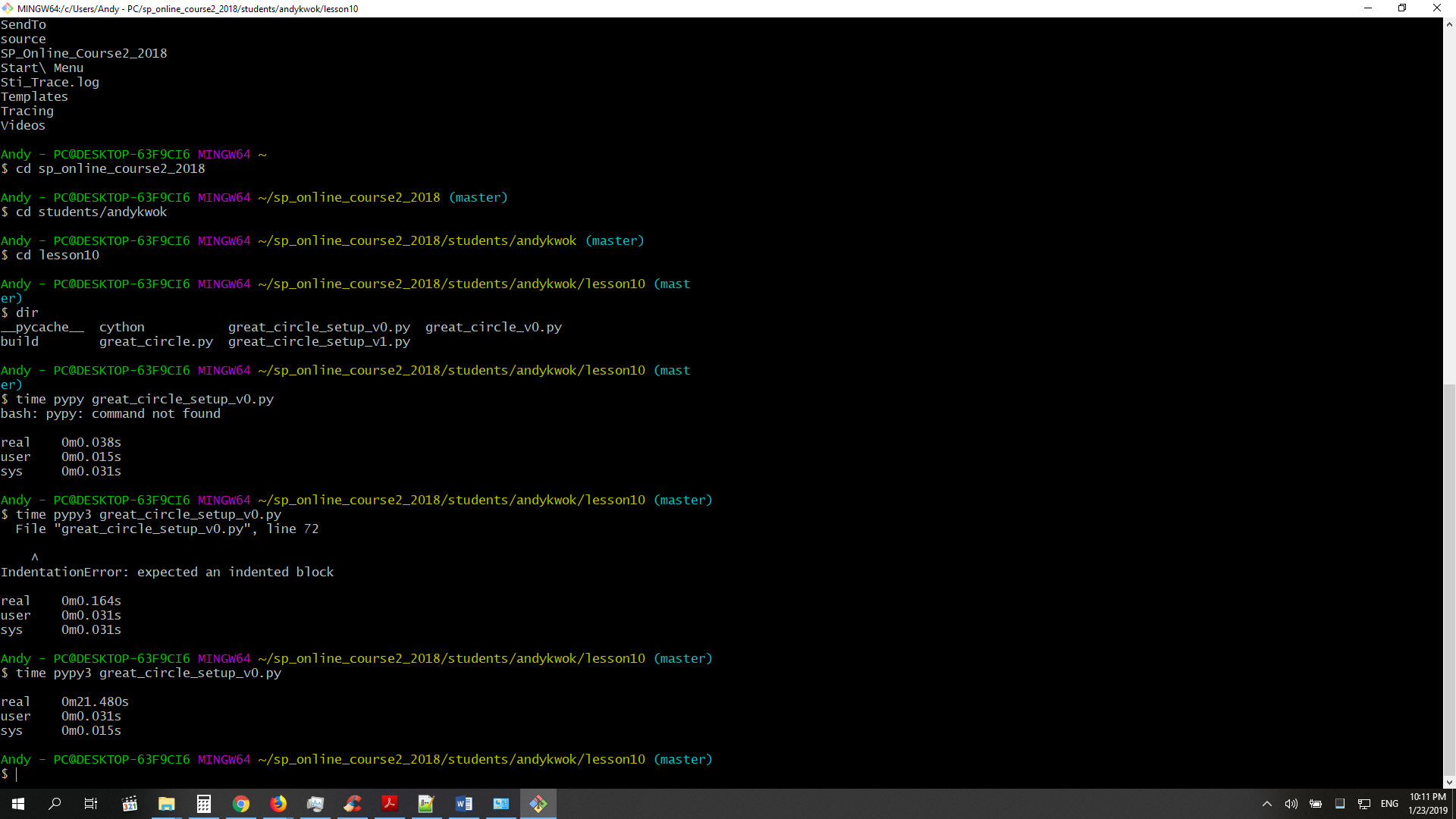
Here is a summary of ran code for first part of great circle exercise.

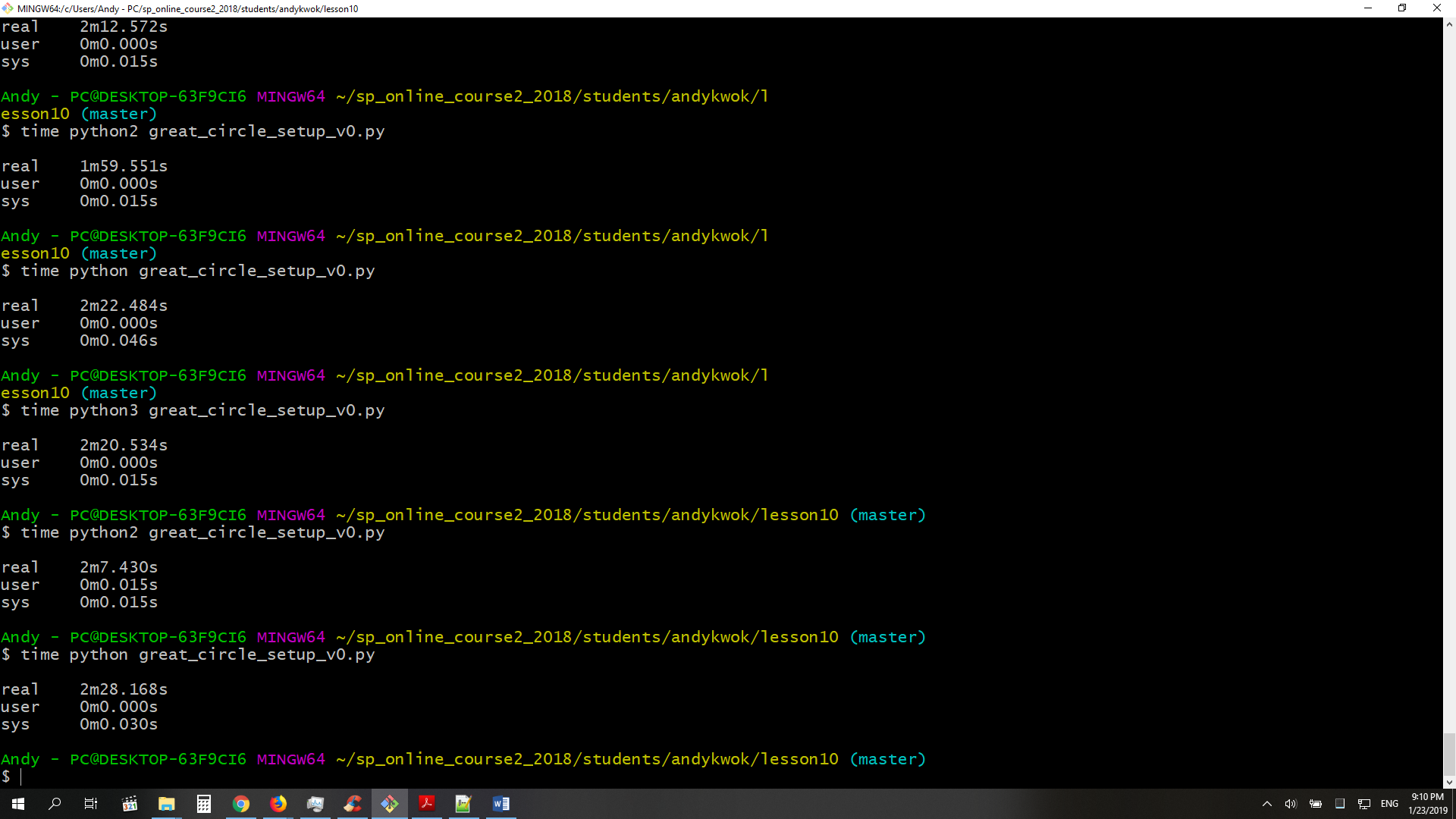


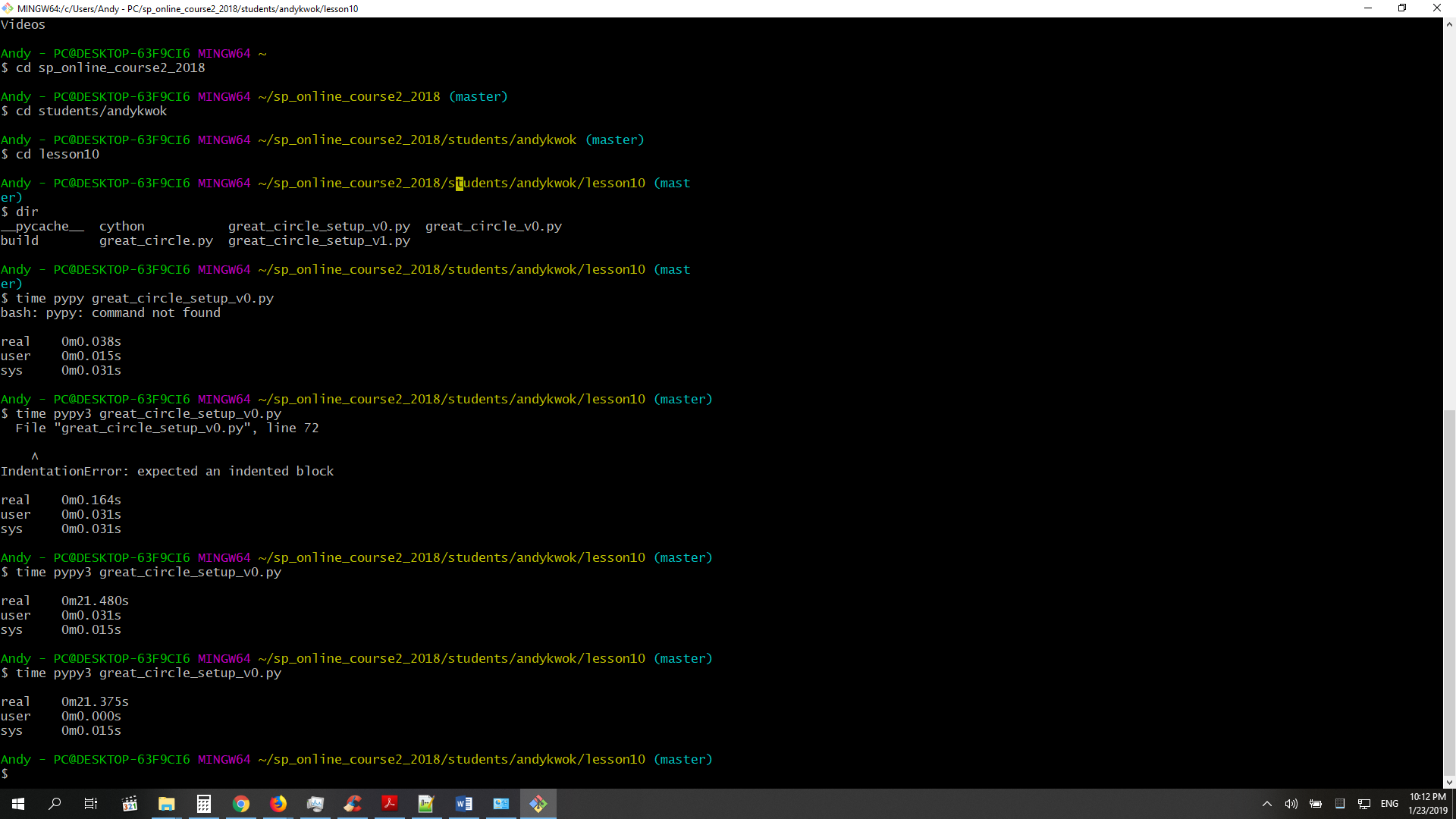
The above shows the corresponding versions of the python that was use to run the great circle code.



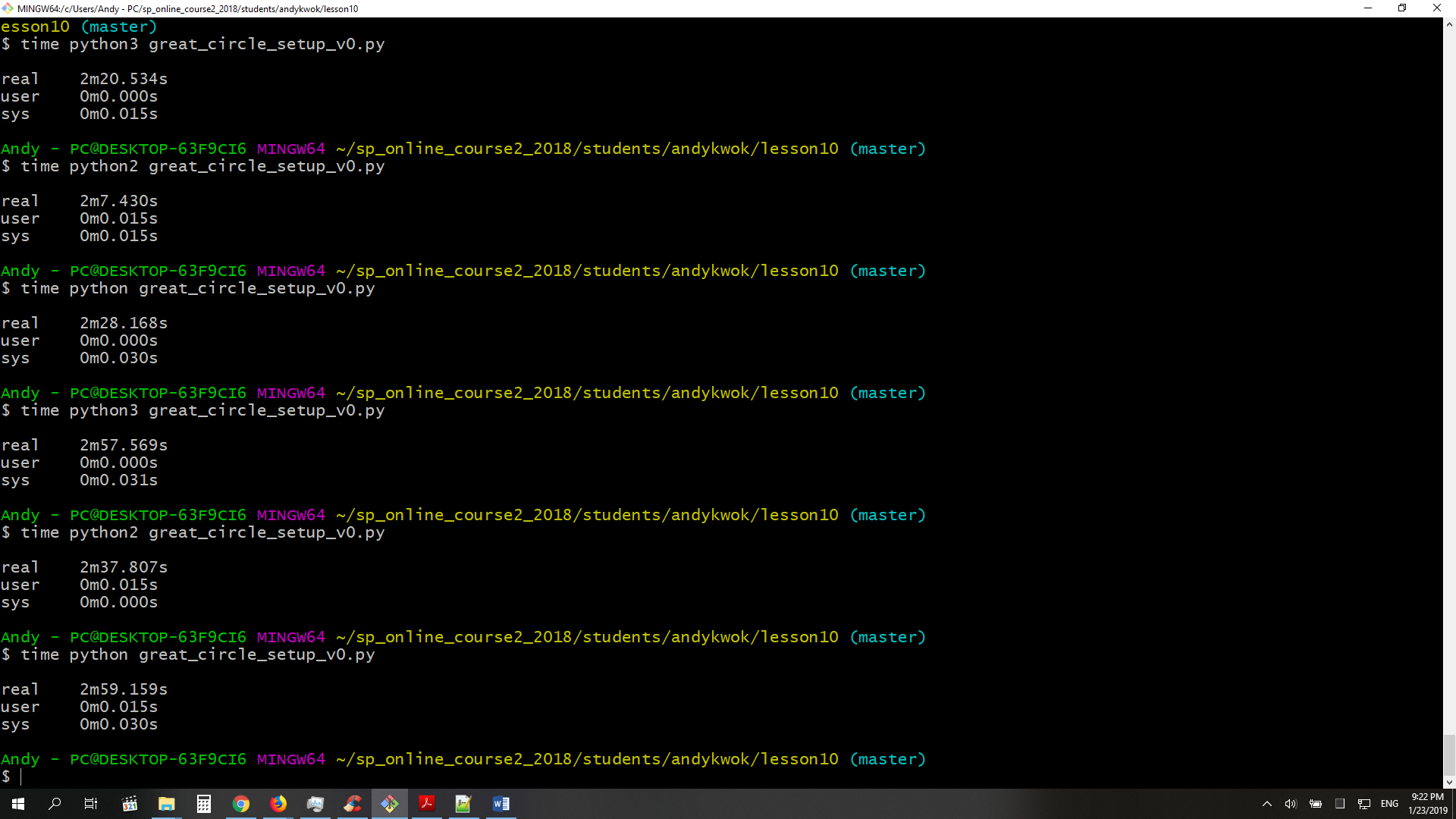


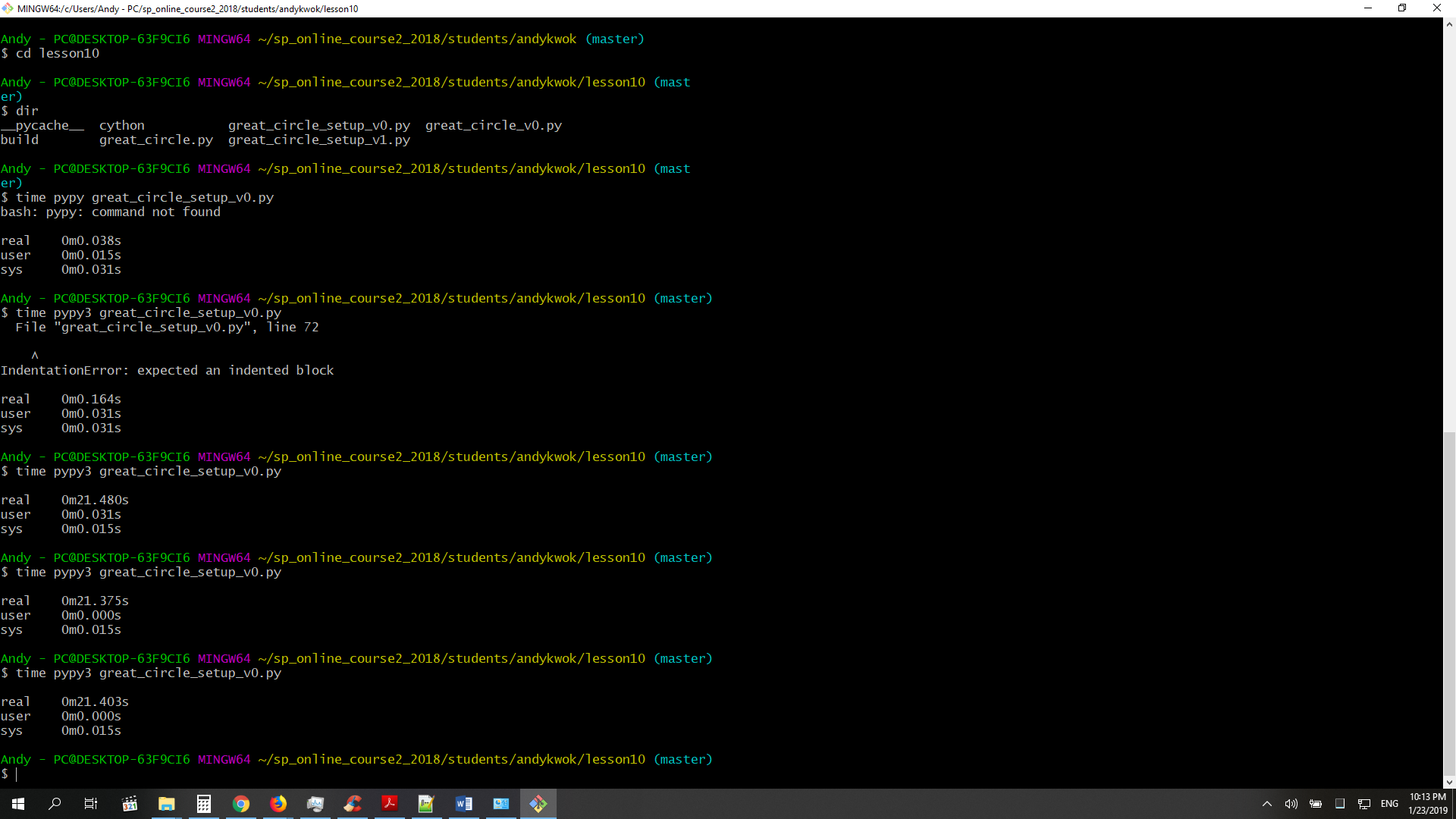
Above are the run times for great circle raw.





Above are the run times for great circle acos.





Above are the run times for great circle factored.