I would like to do my project on the numerov-Cooley method for finding the wave-function in c++. It was suggested by my research group. If you do not think it is a good project please let me know!

I was also considering taking one of the c++ files from class and learning how to rewrite the same thing in Python. I only have minimal experience with Python from a textbook (headfirst Python) that was given to me a few weeks ago. I'd be interested in using the project to get used to another language if that's allowed, especially because my research group seems to use a lot of Python!

Quantum Chumistry, Ira N Levine (1999) Equation 4.75

Wavefunction

Numerov Cooley Method

Lharmonic oscillator Potential