Comp Phys ps-3

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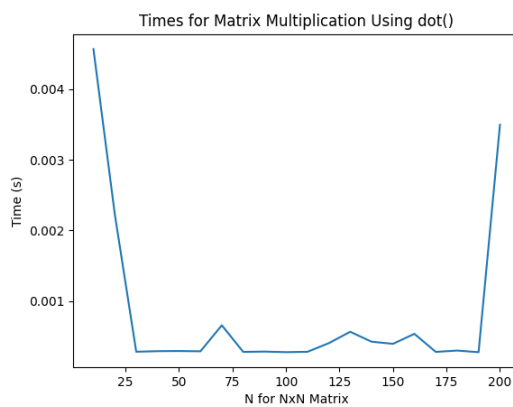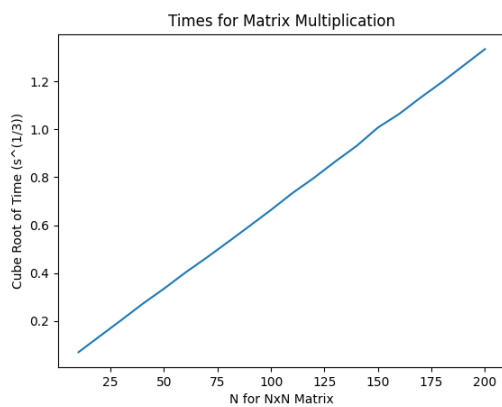
Abstract

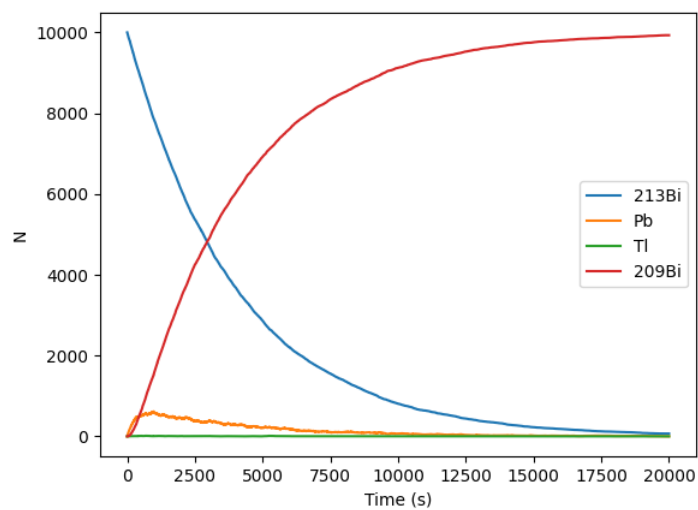This document contains the solutions to the third problem set for computational physics 2023.

1 Derivative

a) The derivative we defined is an approximation and therefore not precisely the same as analytical derivative.
b) The error gets smaller as we increase precision until the point where floating point arithmetic in the computer becomes relevant (due to using very small numbers).
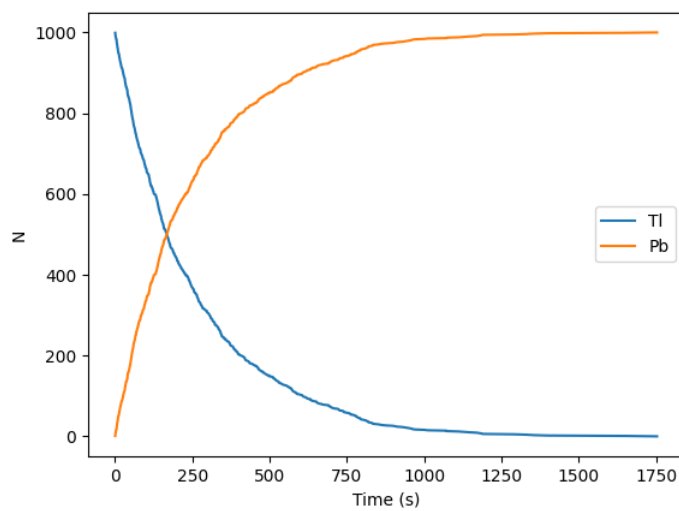
2 Matrix Multiplication

3 Decay

4 Decay

5 My GitHub

My GitHub username is andredubovski and my repo is here: https://github.com/andredubovski/phys-ua210