

# Mini-project 1 Description

You will have two class periods to work on this assignment. Collaboration is welcome during the mini-project, but **you will be expected to submit your own individual work**. This assignment is graded based on the rubric supplied in the Course Resources module.

Options for the mini-project (you will choose one):

1. Making different approximations for a physical quantity and comparing them
2. Computing and comparing efficiencies of different ways to model a physical process
3. Debugging code for a computer science algorithm and applying it to physics

For each option, you will be given:

- The context of the problem at hand
- A statement of your overall goal for the mini-project
- Some existing code to get you started
- Some smaller required tasks and/or clarifications that you must address in your solution
- Reflection prompts

Over the two class periods, you must flesh out a "report" (your .ipynb file) that addresses the following:

- State the problem and goal in your own words.
- Describe your solution plan and the methods you intend to use (you can include language from the given tasks here).
- Building on the given code, provide and clearly explain a computational solution that meets your goal.
- Explain your findings using outputs from code and clear visualizations.
- Reflect on your project by directly responding to the given prompts. The reflection topics are computational approaches, usage of physics, outside resources, and challenges.