

**Lab Assignment #1**

*Available Wed Jan 15; due Fri Jan 24 11:59 pm*

*In this Lab you will write Python code and run it. You can write the code yourself or get an LLM to do it. Run the code in Google Colab. If it does not run correctly, rewrite until it works correctly.*

**Purpose of Lab 1**

To see Python code for arithmetic operations and loops, define functions and draw graphs. To understand the types of explanation required in Part 2.

**Part 1**

1. Write Python code to add two numbers of your choice and display their sum.
2. Write Python code using a loop to add a sequence of at least five numbers of your choice. The code should print out the partial sums and the final total.
3. Write Python code to plot and label a quadratic function of your choice in a window that shows its vertex. Have the code mark and label the vertex on the graph of quadratic.

**Part 2**

4. Explain what your code does using in-line comments (the kind that start with a '#'). You can either add one comment per line or if multiple lines can be adequately explained with a single comment, you may do that instead.
  - **Delete any #Comment Lines input by LLM**
  - **Add your own ##EXPLANATIONS with two ## and ALL IN CAPS**

To see the level of detail suggested, look at **Lab1.SampleAnswers.pdf**

**Hand In on Gradescope**

Your **Google Colab .ipynb** file. Use download to .ipynb in Google Colab or another method.

**Grading**

- A successful run of code showing output.
- Your code explanations. This part will be worth most of the points.