**Python Extra Credit**

Create a main.py file with the following contents:

* Create a Python function that calculates the hypotenuse of a triangle using Pythagorean Theorem.
  + For more information on what Pythagorean Theorem is, please refer to the following: <https://www.calculator.net/pythagorean-theorem-calculator.html>
  + Test the created function by calling the function and comparing the solution to the correct answer using the website calculator linked above.
  + All inputs and outputs should be a **float** data type.
* From the foobar.txt file posted on slack create a function that:
  + Opens the file in read mode
  + Creates a new line with the “,”
  + Prints out the new file output
  + Closes the file
* Import the following library fibo and **only import the following function**: fib
  + Hint: The syntax on how to write this from python statement is in your Python assessment.
  + Create a function using the fibo library and the fib function.
* Create a function using the sys library that takes in two arguments from the user and prints both arguments out.
* Create a function with a while loop with the following:
  + Takes in an **int** user input
  + If the int is greater than -1, decrement the user input by 5.
  + Print the new user input in the while loop.
  + Once the user input is less than -1, the while loop should exit.
* Explain what Python Mitigation is. Why is this a possible security vulnerability? What is an example of a Python Mitigation?

For each function created, make sure to add comments on the purpose of the function.

Submitting your Extra Credit:

* Create a formatted README.md file in this directory with the Python Mitigation write-up and information on the repository.
  + For information on how to format md files please refer to: <https://docs.github.com/en/get-started/writing-on-github/getting-started-with-writing-and-formatting-on-github/basic-writing-and-formatting-syntax>
* Create a new Repository in Github and push the contents of the directory (main.py and README.md)
  + For more information please refer to: <https://docs.github.com/en/get-started/importing-your-projects-to-github/importing-source-code-to-github/adding-locally-hosted-code-to-github>

Paste the link to your repository in the Extra Credit:

**Graphical user interface, text, application, email

Description automatically generated**