

Math 255 - Spring 2022
Implementing the Euclidean algorithm
10 points

This assignment invites you to program your own implementation of the Euclidean algorithm to compute the greatest common divisor of two nonzero integers. For this assignment, it is preferred if you write Python or Sage code, but please contact me if you would prefer to use a different programming language.

Your code, however it may be, should contain a function called `euclidean_alg` which takes as input two integers a and b , and outputs the greatest common divisor of a and b . The internal workings of your code must use the Euclidean algorithm to do this computation.

If you are using Python, please note that `a // b` will output the quotient of a divided by b , and `a % b` will output the remainder of a divided by b , if a and b are integers and b is positive. You may use these functions in your code.

For full credit, please ensure that your function can compute `euclidean_alg(9585,3940)` very quickly (should be instantaneous basically).

There are several implementations of the Euclidean algorithm available online; if you use outside resources to inform your code, please cite your sources in comments inserted in the code.