Question Number 9

Implement the Euclidean GCD and Extended Euclidean GCD functions in Sage. Use them to write two wrapper functions to find number of invertible elements in Zm, given m and the inverse of any element in Zm (Throw an error message if not invertible). Sage also has in-built functions for solving the above problem. Redo it using inbuilt functions.

Solution. Answer in the Q9.sage file.