

ASSIGNMENT 2: Mystery

Upon compilation Mystery program requires two arguments: the string “Input:” followed by some string argument.

Mystery will then output the sequence “Output:”, followed by a string, which will be identical to your input except for the following regards:

Beginning on the 4th character, Mystery will capitalize every even character of the string if it is a letter.

Mystery does this in the following manner: main calls foo, which capitalizes every even character.

foo then sends every character to bar, which takes the character and tests for primeness using modulus.

bar then makes every prime character lowercase.

Big O:

Running time: $O(n)$

Space complexity: $O(n)$