Assignment 2

For all of these problems, your submission should be a separate .py file.

Your entire submission should be a zipped file containing multiple .py files.

For this entire homework,
do not use any functions other than
int, input, print, and functions you define.

For the following two problems,
Write a program that performs fizzbuzz, outputting numbers from 1 to n,
where multiples of 3 (and not 5) are replaced by "fizz",
multiples of 5 (and not 3) are replaced by "buzz",
and multiples of 15 (5 and 3) are replaced by "fizzbuzz"

1. 20 points

Write fizzbuzz without defining any functions.

2. 20 points

Write fizzbuzz without performing any assignment (you will use functions).
That is, never use the "=" operator.
You may use the equality operator "==", however.

Edit: You may also not use foreach loops (the keyword "for"),
or assignment through +=, *=, etc.

For the following problems, we assume that all inputs are positive integers.
You may use assignment (=) and equality checking (==) freely.

3. 15 points

Write a program that computes the sum of two numbers (inputted from the user),
with its only arithmetic operation "+= 1", that is, incrementation.

That is, you can add 1 to a variable, but you cannot otherwise perform addition, etc.

4. 15 points

Write a program that computes the product of two numbers (inputted from the user),
with its only arithmetic operation "+", and incrementation by 1 (+= 1).
That is, you may add, but may not use the multiplication operator.

5. 15 points.

Write a program that computes exponentiation of two numbers inputted from the user.
That is, the user enters n, and then m, and the program calculates n raised to the power m.

You may only use the multiplication operator "*", addition (+), and incrementation by 1 (+= 1).

6. 15 points.

Write a program that computes exponentiation of two numbers inputted from the user,
using only incrementation (by 1).