Q1: A Plus Abs B
Fill in the blanks in the following function definition for adding a to the absolute value of b, without calling abs.

Q2: Two of Three
Write a function that takes three positive numbers and returns the sum of the squares of the two largest numbers. Use only a single line for the body of the function.

Q3: Largest Factor
Write a function that takes an integer n that is greater than 1 and returns the largest integer that is smaller than n and evenly divides n.

Q4: Hailstone
Douglas Hofstadter's Pulitzer-prize-winning book, Gödel, Escher, Bach, poses the following mathematical puzzle.

1. Pick a positive integer n as the start.
2. If n is even, divide it by 2.
3. If n is odd, multiply it by 3 and add 1.
4. Continue this process until n is 1.

The number n will travel up and down but eventually end at 1 (at least for all numbers that have ever been tried -- nobody has ever proved that the sequence will terminate). Analogously, a hailstone travels up and down in the atmosphere before eventually landing on earth.

This sequence of values of n is often called a Hailstone sequence, Write a function that takes a single argument with formal parameter name n, prints out the hailstone sequence starting at n, and returns the number of steps in the sequence: