Part 1: While Loops

Do the following exercises in a file called while_fun_loops.py in the ~/intro_class folder.

1. Using a while loop, print out the numbers from 1 to 20.
2. Using a while loop, print out the numbers from 1 to 20, but if the number is 13, print the word “hello” instead of the number
3. Using a while loop, print out the numbers from 0 to 100 (including the number 100) in increments of 10. (e.g. 0, 10, 20, 30, … , 100)
4. Using a while loop, print out the odd numbers from 0 to 10.
5. Using a while loop, print out the numbers from 10 to 0 (including 0).
    a. Modify this while loop to print out “Blastoff!” instead of printing 0.
6. Create a list called fruits that contains “apples”, “oranges”, and “bananas”
    a. Using a while loop, go through the list, and print out each fruit.
7. Create a function called sum_nums that takes in a number called num. sum_nums should add up all of the numbers from 0 until (but not including) num. sum_nums should return this sum.

    Example: print sum_nums(3)⇒ 3
    a. Modify sum_nums to add up all the numbers from 0 to num, including num.
    Example: print sum_nums(3)⇒ 6
    b. Write a function called sum_nums2 that checks if the parameter num is negative. If it is, sum_nums2 should add up all of the numbers from 0 to the negative number and return that sum. If the parameter num is positive, sum_nums2 should work the same as sum_nums from #7 part A.
    Example: print sum_nums2(-3) ⇒ 6
8. Write a function called fizz_buzz that prints the numbers from 1 to 100. But for multiples of three print “Fizz” instead of the number and for the multiples of five print “Buzz”. For numbers which are multiples of both three and five print “FizzBuzz”.