CSCI 39548-03(4864) Web Development

Assignment #4

Due: 10/2 @ 5pm

1 Looping a triangle

Write a loop that makes n calls to console.log to output the following triangle:
Example with n equals 7. Your program should work by only having to change the variable **n**.
```
#
##
###
####
#####
######
#######
```

It may be useful to know that you can find the length of a string by writing .length after it.

let abc = "abc";
console.log(abc.length);
// → 3

2 FizzBuzz

Write a program that uses console.log to print all the numbers from 1 to 100, with two exceptions. For numbers divisible by 3, print "Fizz" instead of the number, and for numbers divisible by 5 (and not 3), print "Buzz" instead.

When you have that working, modify your program to print "FizzBuzz" for numbers that are divisible by both 3 and 5 (and still print "Fizz" or "Buzz" for numbers divisible by only one of those).

(This is actually an interview question that has been claimed to weed out a significant percentage of programmer candidates. So if you solved it, your labor market value just went up.)

3 Chessboard

Write a program that creates a string that represents an 8×8 grid, using newline characters to separate lines. At each position of the grid there is either a space or a "#" character. The characters should form a chessboard.

Passing this string to console.log should show something like this:

```
 # # # #
# # # #
 # # # #
# # # #
 # # # #
# # # #
 # # # #
# # # #
```

When you have a program that generates this pattern, define a binding size = 8 and change the program so that it works for any size, outputting a grid of the given width and height.