

# ICSI 311 Assignment 0 – Get Familiar With BASIC

## Introduction

This semester we will be implementing BASIC. The purpose of this assignment is to get used to the language. You can't write software unless you know what you are building!

BASIC is a very limited language. Skilled programmers find ways to work with limited tools to make applications. Some creativity goes a long way.

The exact version of BASIC we are using doesn't appear to be anywhere online. That means you can't **really** check your work. But you can find something close if you look...

## Details

FizzBuzz is a very common interview question. Print out the numbers from 1 -100, but with a twist – if the number is divisible by 3, print “Fizz” instead of the number. If the number is divisible by 5, print “Buzz” instead of the number. If the number is divisible by both, print “Fizz Buzz” instead of the number. This is a bit challenging because our version of BASIC doesn't directly support modulo. But there is a way – consider rules of integer division...

The Collatz Conjecture – ask the user for a number greater than 1. Find the number of steps it takes to reach 1 by the following rules: if the number is even, divide it by 2. If it is odd, multiply it by 3, then add 1. Print the number of steps.

Class average – create DATA for a small class of 5 students – the first element is the students name, the rest of the DATA is a list of grades. For each student, print their average.