## CSC 256 - Spring 2016 Assignment 3 - Loops Due February 24, 2016 in class\* 5 Points

\* May be turned in February 22, 2016 in class for return on February 24, 2016.

## Introduction

This assignment is intended to get you familiar with translating C loops and if-then structures efficiently.

## **Description**

Efficiently translate the following C++ program into MIPS assembly.

```
int main(void){
    int i = 0;
    int max = 100;
    for (i = 1 ; i <= max ; i++){

        if( i % 3 == 0)
            cout << "Fizz";

        if ( i % 5 == 0 )
            cout << "Buzz";

        if( i % 3 == 0 || i % 5 == 0 )
            cout << endl;
        else
            cout << i << endl;
    }
}</pre>
```

## **Submission**

Please turn in a printout of your program and its output. You can copy/paste the output from the Run I/O window into the document containing your code. **Be sure your name and section number is on the page!** 

Your submission should be in <u>fixed-width font</u> (e.g. Courier), on  $8-1/2 \times 11$  paper. You are welcome and encouraged to use both sides of the page. If you are submitting multiple pages, be sure to staple them together.

N.B: You may recognize this as one of many possible solutions to the famous FizzBuzz job interview question. This is my personally favorite solution. After this assignment you can do it in C++, Java and assembly!