## **Assignment 2**

Write a MIPS program to perform the following tasks:

- Prompt the user for all variables in the expressions.
- Print the results for each expression below.

```
1. Expression 1: ((5x + 3y + z) / 2) * 3
```

- 2. Expression 2:  $x^3 + 2x^2 + 3x + 4$
- Print a message to indicate the program is exiting. "Goodbye!"
- Exit the program cleanly.

## Example output:

```
Enter a value for x: 3
Enter a value for y: 4
Enter a value for z: 5
The result for expression 1 is: 48
The result for expression 2 is: 58
Goodbye!
```

## Note:

- Don't forget Readability/Comments.
- Expression 1 may result in fractional values, but you may use integer arithmetic. We have not covered floating point instructions yet.
- Run your program with multiple inputs and check your results.

The following are required for all assignments and are included in the rubric for grading:

- You need to name your file as "LastName-Name-Assign2.asm" (Example: Talley-Michelle-Assign2.asm)
- Your program will need to have the exact output unless otherwise stated. *Make sure to use spaces and newlines as required.*
- Your source needs to have comments that explain your implementation, not simply repeat the MIPS instruction. Your comments should explain your complex calculations in C++ or portions of pseudo code before your implementation block.
- Your source needs to include your pseudo code in comments at the top. Your pseudo code needs to match your implementation.
- You need to include the following set of comments at the top of your source code for all assignments.

```
#Your Name
#Assignment # (Example: Assignment #2)
```

• You need to submit your source code on blackboard.

Assignment 1