In-Class Activity 03-2

1 Activity 1 - Basic MIPS Operations

It’s time to write some basic MIPS instructions. (Do this Activity after I’ve introduced MIPS to the class!)

Assume that the following variables are in the following registers:

alpha $s0
bravo $s1
charlie $s2

Write a series of instructions which will perform the following calculations. You may modify any $tX registers, but do not modify any $sX registers (except the one you’re required to modify).

$s3 = alpha + bravo + charlie
$s4 = - bravo - charlie
$s5 = charlie - (alpha + bravo)
$s6 = bravo*2 + charlie*3

2 Activity 2 - Reading MIPS

Convert the following MIPS instructions to pseudocode. (Use the register names like variables.)

addi $t0, $t0, 1
andi $s0, $s3, 0x3
ori $t7, $s0, 0xff
addi $s5, $zero, 11