

```
#####
# Samuel Wait, CS 2318-254, Assignment 2 Part 1 Program D
#####
#Prompt the user to enter the integer scores for Exam 1, Exam 2
#and Final Exam, read the scores,
#compute the weighted average score (using the following formula)
#and display a labeled output about the weighted average score.
##### data segment #####
```

```
prompt1:
prompt2:
prompt3:
avgscore:
##### code segment #####
```

main:

```
.data
.asciiz "Enter integer score for Exam 1: "
.asciiz "Enter integer score for Exam 2: "
.asciiz "Enter integer score for Final Exam: "
.asciiz "Your average score is: "

.text
.globl main

#Prompts the user for integer exam score 1
li $v0, 4
la $a0, prompt1
syscall
#Takes integer user input from prompt and stores in $v0
li $v0, 5
syscall
#moves integer user input from $v0 into $t0
move $t0, $v0

li $v0, 11
li $a0, '\n'
syscall

#Prompts the user for integer exam score 2
li $v0, 4
la $a0, prompt2
syscall
#Takes integer user input from prompt and stores in $v0
li $v0, 5
syscall
#moves integer user input from $v0 into $t1
move $t1, $v0

li $v0, 11
li $a0, '\n'
syscall

#Prompts the user for integer final exam score
li $v0, 4
la $a0, prompt3
syscall
#Takes integer user input from prompt and stores in $v0
li $v0, 5
syscall
#moves integer user input from $v0 into $t2
move $t2, $v0

li $v0, 11
li $a0, '\n'
syscall

#Calculate weighted exam 1 score
li $t4, 410
mul $t0, $t0, $t4 # $t0 has $t0 * 410
srl $t0, $t0, 11 # shift right by 11 bits to divide the value by 2048

#Calculate weighted exam 2 score
li $t4, 256
li $t5, 853
sll $t1, $t1, 8 # shift $t1 left by 8 bits to multiply by 256
div $t1, $t5 # $t1 has $t1*256 / 853
mflo $t1 # $t1 has $t1*256 / 853

#calculate weighted final exam score
srl $t2, $t2, 1 # shift right by 1 bit to divide value in $t2 by 2

#add all weighted exam values together
add $t0, $t0, $t1 # $t0 has $t0 + $t1
add $t0, $t0, $t2 # $t0 has $t0 + $t1 + $t2

#displays labeled final result/average score
li $v0, 4
la $a0, avgscore
syscall
li $v0, 1
move $a0, $t0
syscall

#Exit
li $v0, 10
syscall
```