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# Title: Project 1 Part I                               Filename: Project 1 Part I.s
# Author: Dan Cassidy                                   Date: 2015-02-17
# Description: This program will take a number of integers, add
#              them up, and display the sum.
# Input: A series of integers
# Output: The sum of the integers
##### Data segment #####
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.data

```
inputMsg:  .ascii "Enter an integer: "
outputMsg: .ascii "The total sum is "
```

Code segment

.text

.globl main

```
main:                                     #main program entry
      xor     $s0, $s0, $s0              #initialize sum to 0

loop:  li     $v0, 4                      #prepare to print string
      la     $a0, inputMsg               #choose string inputMsg
      syscall                                #print inputMsg
      li     $v0, 5                      #prepare to read input number
      syscall                                #read input number
      add    $s0, $s0, $v0               #add the input number to sum
      bne    $v0, $zero, loop            #if (input!=0) continue loop

      li     $v0, 4                      #prepare to print string
      la     $a0, outputMsg              #choose string outputMsg
      syscall                                #print outputMsg
      li     $v0, 1                      #prepare to print sum
      addi   $a0, $s0, 0                  #set output to sum
      syscall                                #print sum

      li     $v0, 10                     #prepare to exit program
      syscall                                #exit program
```