

Practical-9

Aim Using SPIM, write and test an adding machine program that repeatedly reads in integers and adds them into a running sum. The program should stop when it gets an input that is 0, printing out the sum at that point.

.data

prompt1: .asciiz "\n\n Enter the first integer please:"

prompt2: .asciiz "Enter the second integer please:"

result: .asciiz "The result is:"

.text

main:

#t0- to hold first integer

#t1- to hold second integer

#t2- used to hold the sum of t\$1 and t\$2

#first number

li \$v0, 4 #syscall to print string

la \$a0, prompt1 #address of string to print

syscall

#

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li$v0, 5 #syscall to read an integer
syscall
move $t0, $v0 #move the number to read into $t0
#second number
li$v0, 4
la$a0, prompt2
syscall
#
li$v0, 5
syscall
move $t1, $v0
#
#print out sum of $t2
li$v0, 4
la$a0, result
syscall
#
add $a0, $t1, $t0 #compute the sum
li$v0, 1
syscall
#
li$v0, 10
syscall

```

Output

:

Enter the first integer please 6

Enter the second integer please 4

The result is 10