```
#-----------------------------------------------
main:       lui     $s2,0x1000        # load base addr

            lw      $s3,0($s2)        # load data count
            add     $s2,$s2,4         # data start address

            add     $s1,$zero,$zero   # init accumulator
            add     $s0,$zero,$zero   # init loop variable

Loop:       slt     $t0,$s1,$s3
            beq     $t0,$zero,Exit

            add     $t0,$s1,$s1       # begin compute effective address
            add     $t0,$t0,$t0
            add     $t1,$s2,$t0       # end compute effective address
            lw      $t0,0($t1)

            sub     $t0,$zero,$t0
            add     $s0,$s0,$t0
            addi    $s1,$s1,1
            j       Loop

#-----------------------------------------------
Exit:       ori     $2,$0,10          # system call: exit program
            syscall
```