```
#soma de vetores

.data
A:      .space  32      # 8 inteiros
B:      .space  32
C:      .space  32
i:      .word   0
st_abre_colchete:   .asciiz "C["
st_fecha_colchete:  .asciiz "]="

.text
j main
main:
addi $S0,$zero, 0       #$S0 -> i
addi $S1,$zero, 8       # $S1 -> limite superior
```

```
LOOP_1: slt $t0, $S0, $S1
        beq $t0, $0, FIM_LOOP1
        la  $t1, A
        add $t2, $S0, $S0   # i*4
        add $t2, $t2, $t2
        add $t1, $t1, $t2
        sw  $S0, 0($t1)
        la  $t1, B
        addi $S3, $S0, 2    # 2+i
        add $t1, $t1, $t2
        sw  $S3, 0($t1)
        la  $t1, C
        add $t1, $t1, $t2
        sw  $zero, 0($t1)
        addi $S0, $S0, 1    # i++
        j LOOP_1
FIM_LOOP1: nop
```

```
        addi $s0, $0, 0     # i=0
LOOP_2: slt  $t0, $s0, $s1
        beq  $t0, $0, FIM_LOOP2
        la   $t1, A
        la   $t2, B
        la   $t3, C
        add  $t4, $s0, $s0  (#i)
        add  $t4, $t4, $t4
        add  $t5, $t1, $t4  #A[i]
        lw   $s2, 0($t5)
        add  $t5, $t2, $t4  #B[i]
        lw   $s3, 0($t5)
        add  $s4, $s2, $s3
        *
        * add $t5, $t3, $t4
          sw  $s4, 0($t5)
          addi $s0, $s0, 1  #
          j LOOP_2
FIM_LOOP2: nop
```

F

```
        addi $s0, $0, 0
LOOP_3: slt $t0, $s0, $s1
        beq $t0, $0, FIM_LOOP3
        la $t1, C
        add $t2, $s0, $s0  # i*4
        add $t2, $t2, $t2
        add $t1, $t1, $t2
        lw $s3, 0($t1) #C[i]
        la $a0, st_abre_colchete
        addi $v0, $0, 4
        syscall
        addi $v0, $0, 1
        add $a0, $0, $s0
        Syscall
        la $a0, st_fecha_colchete
        addi $v0, $0, 4
        Syscall
        addi $v0, $0, 1
        add $a0, $0, $s3
        Syscall
        addi $s0, $s0, 1 #i++
        j LOOP_3
FIM_LOOP3 : nop

        addi $v0, $0, 10  # finalizar pr
        Syscall
```