

$n = \$a_1$
 $i = \$s_2$
 $c = \$a_2$

$\left[\begin{array}{l} \text{SW } \$a_0, 8(\$sp) \\ \text{SW } \$a_1, 4(\$sp) \\ \text{SW } \$a_2, 0(\$sp) \end{array} \right.$

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addi $sp, $sp, -4
sw $ra, 0($sp)
|
addi $s2, $zero, 1 ← i=1      i < n, t0 = 1
                                i > n, t0 = 0
Loop:
slt $t0, $s2, $a1 } i < n
beq $t0, $zero, EXIT
sll $t1, $s2, 2 ← i * 4 = t1
addi $t2, $s2, -1 ← i - 1
sll $t2, $t2, 2 ← (i - 1) * 4 = t2
lw $t3, $t1($a0)    a[i]
lw $t4, $t2($a0)    a[i-1]
add $t3, $t3, $t4    a[i] = a[i] + a[i-1]
sw $t3, $t1($a0)
addi $s2, $s2, 1
j Loop

```

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Exit:
addi $t0, $a1, -1 - n - 1
sll $t0, $t0, 2 ← (n - 1) * 4
lw $t1, $t0($a0) ← a[n-1]
slt $t2, $a2, $t1    c < a[n-1]
beq $t2, $zero, ELSE
addi $v0, $zero, 0
j ExitF
ELSE: addi $v0, $zero, 1
ExitF:
lw $ra, 0($sp)
addi $sp, $sp, 4
jr $ra.

```