

```
.data
theArray:
.space 160
.text
main:
    li    $t6, 1           # Sets t6 to 1
    li    $t7, 4           # Sets t7 to 4
    sw    $t6, theArray($0) # Sets the first term to 1
    sw    $t6, theArray($t7) # Sets the second term to 1
    li    $t0, 8           # Sets t0 to 8
loop:
    addi  $t3, $t0, -8
    addi  $t4, $t0, -4
    lw    $t1, theArray($t3) # Gets the last
    lw    $t2, theArray($t4) # two elements
    add   $t5, $t1, $t2      # Adds them together...
    sw    $t5, theArray($t0) # ...and stores the result
    addi  $t0, $t0, 4        # Moves to next "element" of theArray
    blt   $t0, 160, loop    # If not past the end of theArray, repeat
    jr    $ra
```