

Date: 2017/03/21

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Ans.

Translate the following MIPS code to C. Assume that the variables f, g, h, i, and j are assigned to registers \$s0, \$s1, \$s2, \$s3, and \$s4, respectively. Assume that the based address of the arrays A and B are in register \$s6 and \$s7, respectively.

addi \$t0, \$s6, 4
add \$t1, \$s6, \$0
sw \$t1, 0(\$t0)
lw \$t0, 0(\$t0)
add \$s0, \$t1, \$t0

$t_0 \rightarrow \&A[1]$
 $t_1 \rightarrow \&A[0]$
 $A[1] = \&A[0]$
 $t_0 = A[1]$

$f = \&A[0] + A[1]$