

Q2.

load index range
addi \$t3, \$0, 0
addi \$t0, \$0, 1000

L1:

increment index by 4 each time
sll \$t4, \$t3, 2
get index value of array A
add \$t5, \$t4, \$11
get index value of array B
add \$t6, \$t4, \$12

store the fourth byte of A in the first byte of B
load i-th element of array A into temporary register
lb \$t8, 3(\$t5)
store the corresponding element of A into B
sb \$t8, 0(\$t6)

store the third byte of A in the second byte of B
lb \$t8, 2(\$t5)
sb \$t8, 1(\$t6)

store the second byte of A in the third byte of B
lb \$t8, 1(\$t5)
sb \$t8, 2(\$t6)

store the first byte of A to the fourth byte of B
lb \$t8, 0(\$t5)
sb \$t8, 3(\$t6)

#increment index range by 1
addi \$t3, \$t3, 1

#decrement loop counter
addi \$t0, \$t0, -1
#check loop counter
bne \$t0, \$0, L1