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1. In MIPS assembly, write an assembly language version of the following C code segment: You only need to write the assembly code segment, not the data segment.

Assume variables are *f, g, h, i, j* and base addresses of integer arrays A, B are stored in $s0,$s1,$s2,$s3,$s4,$s5,$s6 respectively.

B [ 3 ] = A [ i - j ]

Sub $t0, $s3, $s4

Sll $t0, $t0, 2

Add $t0, $t0, $s5

Lw $t0, 0($t0)

Sw $t0, 12($s6)

1. What is the binary value stored in $s3 after this operation?

**$s0 = 0001 1000**

**$s1 = 0011 0011**

**and $s3,$s0,$s1**

**$s3 = 0001 0000**

1. What is the binary value stored in $s3 after this operation?

**$s0 = 0001 1000**

**$s1 = 0011 0011**

**or $s3,$s0,$s1**

**$s3 = 0011 1011**

1. What is the binary value stored in $s2 after this operation?

**$s1 = 0011 0011**

**nor $s2,$s1,$zero**

**$s2 = 1100 1100**

1. The MIPS NOR with $zero (from number 4) is equivalent to what bitwise operator?

**not $s2, $s1**