# this program performs various logical operations

.data
label: .word 0x0f000000
label1: .word 0xffffffff

.text
.globl main

main: lw $t0, label($0)
    lw $t1, label1($0)
    and $t2, $t0, $t1       # should produce 0x0f000000 in $t2
    andi $t3, $t1, 0xffff   # what value will be in $t3?
    srl $t2, $t2, 12        # what do we have in $t2 now?
    move $t0, $0            # initialize $t0 to 0
    lui $t0, 0x0f00         # store a 32-bit constant into $t0

    andi $t0, 0x0000         # program termination

li $v0, 10
syscall