

1. For the following C statement, what is the corresponding MIPS assembly code? Assume that the C variables f, g, and h, have already been placed in registers \$s0, \$s1, and \$s2, respectively. Use a minimal number of MIPS assembly instructions.

$F = g + (h - 5);$

2. Write a single C statement that corresponds to the two MIPS assembly instructions below.

Add f, g, h

Add f, l, f

3. For the following C statement, write the corresponding MIPS assembly code. Assume that the variables f, g, h, l, and j are assigned to registers \$s0, \$s1, \$s2, \$s3, and \$s4, respectively. Assume that the base address of the array A and B are in registers \$s6 and \$s7, respectively.

$B[8] = A[i-j]$

4. Show how the value 0xabcdef12 would be arranged in memory of a little-endian and a big-endian machine. Assume the data are stored starting at address 0 and that the word size is 4 bytes.

5. Translate 0xabcdef12 into decimal.