

CSCI 341: Computer Organization
WS 4: Memory Access Instructions

1	<p>Consider an array A of integers, whose base address is 2000, which is stored in s3. g is stored in s1, h is in s2. Consider the instruction:</p> $A[9] = g + h;$ <p>What assembly will this result in, in the compiled code?</p> <p>Solution:</p> <pre>add t0, s1, s2 sw t0, 36(s3)</pre>
2	<p>B is a character array. Assume the base address for B is in s4. What is the assembly for $B[3] = B[3] + 32$?</p> <p>Hint, use these steps:</p> <ul style="list-style-type: none">• Load B[3]• Add• Store to B[3] <p>Solution:</p> <pre>lb t0, 3(s4) addi t0, t0, 0x20 sb t0, 3(s4)</pre>