2.25 Translate the following C code to MIPS assembly code. Use a minimum number of instructions. Assume that the values of a, b, i, and j are in registers $s0, $s1, $t0, and $t1, respectively. Also, assume that register $s2 holds the base address of the array D.

for(i=0; i<a; i++)
        for(j=0; j<b; j++)
                D[4*j] = i+j;

2.26 How many MIPS instructions does it take to implement the C code from Exercise 2.25? If the variables a and b are initialized to 10 and 1 and all elements of D are initially 0, what is the total number of MIPS instructions that is executed to complete the loop?