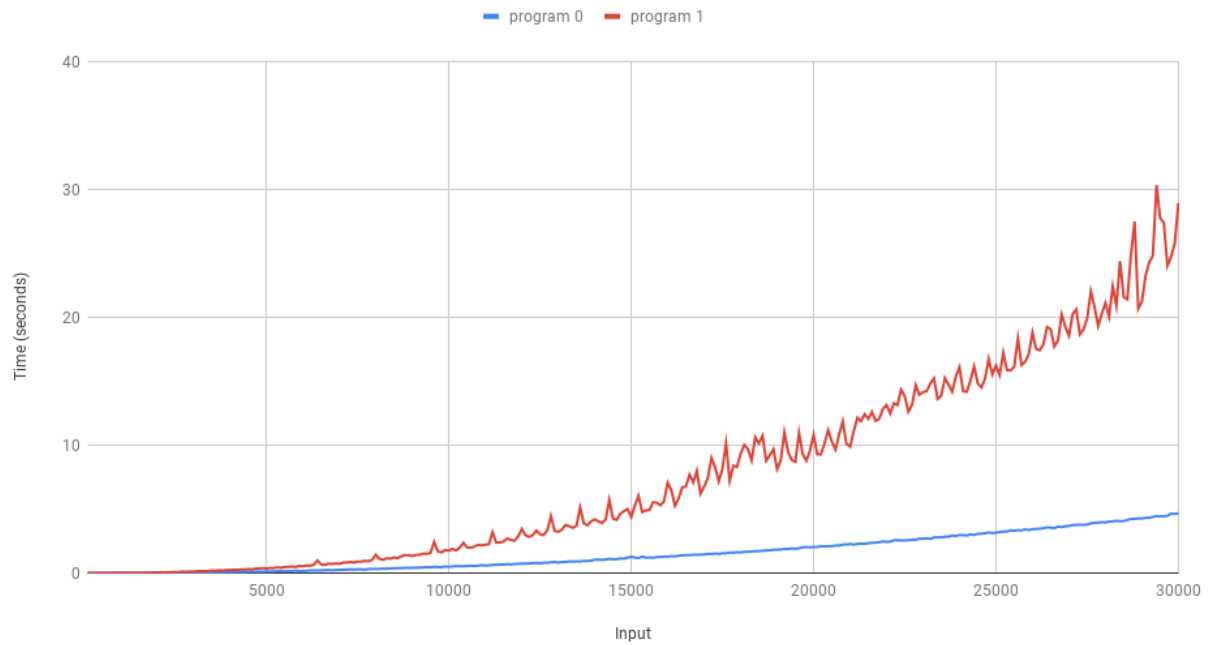


program 0 and program 1



Program 0 and 1 have the same complexity. The only difference in the source code is that program 0 loops through memory through rows in an array (to the next memory address), where program 1 loops through columns (a distant memory address). By looping to the next memory address, program 1 uses fewer ALU operations and so executes faster. " $i * \text{size}$ " can be calculated once per outer loop iteration, where $j * \text{size}$ must be calculated every iteration of i and j .