

# Άσχετος Καταρίδης

## • ΑΣΚΗΣΗ 1

Ⓐ min:  
li \$t0, 0(\$a0)  
li \$t1, 1

loop:  
bge \$t1, \$a1, end  
slr \$t2, \$t1, 2  
add \$s3, \$a0, \$t2  
lw \$t4, 0(\$t3)  
blt \$t4, \$t0, update  
j next

update:  
move \$t0, \$t4

next:  
addi \$t1, \$t1, 1  
j loop

end:  
move \$v0, \$t0  
jr \$ra

Ⓑ for(int i=0; i<1000; i++) arr[i] \*= 8;

## • ASK2H 2

.data

x: .word 74

.text

.globl main

main:

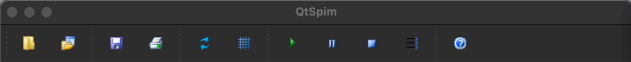
```
lw $a0, x
jal BitCount
move $a0, $v0
li $v0, 1
syscall
li $v0, 10
syscall
```

BitCount:

```
andi $s0, $a0, 1
addi $sp, $sp, -12
sw $ra, 0($sp)
sw $a0, 4($sp)
sw $s0, 8($sp)
beq $a0, $zero, return
str $a0, $a0, 1
jal BitCount
lw $s0, 8($sp)
lw $a0, 4($sp)
lw $ra, 0($sp)
addi $sp, $sp, 12
add $v0, $v0, $s0
jr $ra
```

return:

```
add $v0, $zero, $zero
addi $sp, $sp, 12
jr $ra
```



Memory and registers cleared

```
SPIM Version 9.1.23 of December 4, 2021
Copyright 1990-2021 by James Larus.
All Rights Reserved.
SPIM is distributed under a BSD license.
See the file README for a full copyright notice.
QtSPIM is linked to the Qt library, which is distributed under the GNU Lesser General Public
License version 3 and version 2.1.
```

