Sean Mulhall

Computer Org

Homework 3

1.

ar1: .word 0:50

ar2: .word 0:50

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add $s4, $zero, $zero #i=0

la $s0, ar1

la $s1, ar2

for: slti $t0, $s4, 50

beq $t0, $zero, endfor

add $t1, $s4, $s1

add $t1, $t1, $t1

add $t1, $t1, $s1

lw $t2, 0($t1)

sw $s0, 0($t2)

addi $s4, 1

j for

endfor: -------

2.

.data

ar: .word 11, 3, 8, 43, 22, 15, 8, 51, 100, 2

la $s0, ar

add $s4, $zero, $zero #i = 0;

for: slti $t1, $t0, 10

beq $t1, $zero, endfor

add $t0, $s4, $s4

add $t0, $t0, $t0

add $t0, $t0, $s4

lw $t2, 0($t0)

slt $t3, $zero, $t2

beq $t3, $zero, ifpart

addi $s4, $zero, 1

j for

ifpart: lw $a0, 0($t2)

addi $v0, $zero, 1

syscall

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3.

.data

ar: .word 0:10

la $s0, ar

addi $s4, $zero, 9 #i = 9;

for: slt $t1, $s4, $zero

bne $t1, $zero, endfor

add $t0, $s4, $s4

add $t0, $t0, $t0

add $t0, $t0, $s4

addi $v0, $zero, 5

syscall

sw $v0, 0($t0)

addi $s4, $zero, -1

j for

endfor:-------

4.

0001 0010 0111 0001 0000 0000 0000 1010

0000 0010 0111 0100 0100 0000 0010 0000

1000 1101 0000 1001 0000 0000 0000 0000

0000 0010 0000 1001 1000 0000 0010 0000

0010 0010 0111 0011 0000 0000 0000 0100

0000 1000 0000 0000 0000 0000 0000 0100 loop

endwhile

5.

for(8000) slti $t0, $s0, 10

beq $t0, $zero, endfor(8008)

add $s0, $s0, $s1

j for

endfor: add $s0, $s0, $s2