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Curso: GEC	Período: P8	Matéria: C208

Atividade 14/10

1.

a.

Passos	$t0	$t1	$t2
1	3	0	0
2	3	1	0
3	3	1	4

b. Esse programa realiza a soma entre $t0 e $t1 e guarda em $t2, onde os valores 3 e 1 foram adicionados a $t0 e $t1, através do comando addi e posteriormente somados pelo comando add

2.

a.

```
.text

# $t1 = f
# $t2 = g

addi $t1,$0,5
addi $t2,$0,3
add $t3,$t1,$t2
```

b.

Passos	$t1	$t2	$t3
1	5	0	0
2	5	3	0
3	5	3	8

c.

```
.text

# $t1 = g
# $t2 = h
# $t3 = i
# $t4 = j

addi $t1,$0,3
addi $t2,$0,5
addi $t3,$0,2
addi $t4,$0,1

add $s1,$t1,$t2 #g+h
add $s2,$t3,$t4 #i+j

sub $s3,$s1,$s2
```

d.

```
.text

addi $t1,$0,3
addi $t2,$0,2
mul $s1,$t1,$t2
```

4.

```
.text

addi $t1,$0,5 # b
addi $t2,$0,10 # B
addi $t3,$0,2 # h

add $s1,$t1,$t2 # b+B
mul $s2,$s1,$t3 # (b+B)*h
div $s3,$s2,2 # (b+B)*h/2
```

5.

```
.text

li $t1,54
li $t2,85
li $t3,12
li $t4,64
li $t5,35
li $t6,16
li $t7,64

and $s1,$t1,67  # 54 and 67
and $s2,$t2,91  # 85 and 91
or $s3,$t3,48   # 12 or 48
or $s4,$t4,40   # 64 or 40
xor $s5,$t5,45  # 35 xor 45
srl $s6,$t6,2   # 16 >> 2
sll $s7,$t7,2   # 64 << 2
```

8.

Considere a seguinte parte do programa em linguagem Assembly MIPS

Complete os quadros abaixo considerando as váriaveis declaradas no código.

```
.data
a: .half 7,10
b: .byte 5
c: .byte 50
d: .word 0x86
e: .byte 0x90
f: .ascii "C63S"
g: .word 15
h: .half 14,15
i: .byte 8
```

Endereço	Dado
0x10010000	0x000a0007
0x10010004	0x00320005
0x10010008	0x00000086
0x1001000C	0xS36C90
0x10010010	0x0000000F
0x10010014	0x000F000E
0x10010018	0x00000008
0x1001001C	

9.

a) sw $s3, 8($t0)

REGISTRADOR	
ENDEREÇO	DADO
$t0	
$t1	
$t2	
$t3	
$t4	
$t5	
$t6	
$t7	
$s0	
$s1	
$s2	
$s3	

.word 32
$s3 0xa83fc12e
$t0 0x10010008

MEMÓRIA	
ENDEREÇO	DADO
0x10010000	
0x10010001	
0x10010002	
0x10010003	
0x10010004	
0x10010005	
0x10010006	
0x10010007	
0x10010008	0x2e
0x10010009	0xc1
0x1001000A	0x3f
0x1001000B	0xa8

b) lw $t2, 4($t6)

REGISTRADOR	
ENDEREÇO	DADO
$t0	
$t1	
$t2	0x9CF85E15
$t3	
$t4	
$t5	
$t6	
$t7	
$s0	
$s1	
$s2	
$s3	

.word 32
$t2 0x00000008
4$t6 0x10010008

MEMÓRIA	
ENDEREÇO	DADO
0x10010000	
0x10010001	
0x10010002	
0x10010003	
0x10010004	
0x10010005	
0x10010006	
0x10010007	
0x10010008	
0x10010009	
0x1001000A	
0x1001000B	

c) lh $t5, 6($t0)

REGISTRADOR	
ENDEREÇO	DADO
$t0	
$t1	
$t2	
$t3	
$t4	
$t5	0x8650
$t6	
$t7	
$s0	
$s1	
$s2	
$s3	

.half 16
$t5 0x00000096
6$t0 0x10010006

MEMÓRIA	
ENDEREÇO	DADO
0x10010000	
0x10010001	
0x10010002	
0x10010003	
0x10010004	
0x10010005	
0x10010006	
0x10010007	
0x10010008	
0x10010009	
0x1001000A	
0x1001000B	

d) sb $s0, 0($t3)

REGISTRADOR	
ENDEREÇO	DADO
$t0	
$t1	
$t2	
$t3	
$t4	
$t5	
$t6	
$t7	
$s0	
$s1	
$s2	
$s3	

.byte 8
$s0 0x0000006B
0$t3 0x10010006

MEMÓRIA	
ENDEREÇO	DADO
0x10010000	
0x10010001	
0x10010002	
0x10010003	
0x10010004	
0x10010005	
0x10010006	0x6B
0x10010007	
0x10010008	
0x10010009	
0x1001000A	
0x1001000B	