

Felipe Augusto Moraes Silva

Programa 09

```
mips9.asm
1  # programa 9
2  # .data
3  # x1: .word 15
4  # x2: .word 25
5  # x3: .word 13
6  # x4: .word 17
7  # soma: .word -1
8
9  # Associações :
10 # t0 = MEM[0]
11 # x1 = $s0
12 # x2 = $s1
13 # x3 = $s2
14 # x4 = $s3
15 # soma = $s4
16
17 #inicio
18 .text
19 .globl main
20 main:
21 ori $t0, $zero, 0x1001 # MEM[0] = 0000 1001
22 sll $t0, $t0, 16 # MEM[0] = 1001 0000
23 lw $s0, 0($t0) # x1 = MEM[0]
24 lw $s1, 4($t0) # x2 = MEM[1*4]
25 lw $s2, 8($t0) # x3 = MEM[2*4]
26 lw $s3, 12($t0) # x4 = MEM[3*4]
27 add $t1, $s0, $s1 # t1 = x1 + x2
28 add $t2, $s2, $s3 # t2 = x3 + x4
29 add $s4, $t1, $t2 # soma = t1 + t2
30 sw $s4, 16($t0) # MEM[4*4] = soma
31 .data
32 x1: .word 15
33 x2: .word 25
34 x3: .word 13
35 x4: .word 17
36 soma: .word -1
37 #fim
38
```

Edu - Exercise					Registers			Column 1	Column 2
Text Segment					Name	Number	Value		
Step	Address	Code	Block	Source					
1	0x00000000	0x00000000	0x00000000	ori \$t0, \$zero, 0x1001 # MEM[0] = 0000 1001		0			
2	0x00000004	0x00000000	0x00000000	sll \$t0, \$t0, 16 # MEM[0] = 1001 0000		1			
3	0x00000008	0x00000000	0x00000000	lw \$s0, 0(\$t0) # x1 = MEM[0]		2			
4	0x0000000c	0x00000000	0x00000000	lw \$s1, 4(\$t0) # x2 = MEM[1*4]		3			
5	0x00000010	0x00000000	0x00000000	lw \$s2, 8(\$t0) # x3 = MEM[2*4]		4			
6	0x00000014	0x00000000	0x00000000	lw \$s3, 12(\$t0) # x4 = MEM[3*4]		5			
7	0x00000018	0x00000000	0x00000000	add \$t1, \$s0, \$s1 # t1 = x1 + x2		6			20000000
8	0x0000001c	0x00000000	0x00000000	add \$t2, \$s2, \$s3 # t2 = x3 + x4		7			
9	0x00000020	0x00000000	0x00000000	add \$s4, \$t1, \$t2 # soma = t1 + t2		8			
10	0x00000024	0x00000000	0x00000000	sw \$s4, 16(\$t0) # MEM[4*4] = soma		9			
1									
Data Segment									
Address	Value (+0)	Value (+4)	Value (+8)	Value (+c)	Value (+10)	Value (+14)	Value (+18)	Value (+1c)	
0x10010000	0	0	25	0	15	0	0	0	
0x10010004	0	0	0	0	0	0	0	0	
0x10010008	0	0	0	0	0	0	0	0	
0x1001000c	0	0	0	0	0	0	0	0	
0x10010010	0	0	0	0	0	0	0	0	
0x10010014	0	0	0	0	0	0	0	0	
0x10010018	0	0	0	0	0	0	0	0	
0x1001001c	0	0	0	0	0	0	0	0	
0x10010020	0	0	0	0	0	0	0	0	
0x10010024	0	0	0	0	0	0	0	0	
0x10010028	0	0	0	0	0	0	0	0	
0x1001002c	0	0	0	0	0	0	0	0	
0x10010030	0	0	0	0	0	0	0	0	
0x10010034	0	0	0	0	0	0	0	0	
0x10010038	0	0	0	0	0	0	0	0	
0x1001003c	0	0	0	0	0	0	0	0	
0x10010040	0	0	0	0	0	0	0	0	
0x10010044	0	0	0	0	0	0	0	0	
0x10010048	0	0	0	0	0	0	0	0	
0x1001004c	0	0	0	0	0	0	0	0	
1									
0x10010000 (Data)					<input checked="" type="checkbox"/> Hexadecimal <input type="checkbox"/> ASCII				
<input checked="" type="checkbox"/> Check, display of memory addresses in hexadecimal. Otherwise, decimal.									

```
mips9.asm      mips10.asm
1  # programa 10
2  # y = 127x - 65z + 1
3  # .data
4  # x: .word 5
5  # z: .word 7
6  # y: .word 0
7
8  # Associações :
9  # t0 = MEM[0]
10 # x = $s0
11 # z = $s1
12 # y = $s2
13
14 #inicio
15 .text
16 .globl main
17 main:
18 ori $t0, $zero, 0x1001 # MEM[0] = 0000 1001
19 sll $t0, $t0, 16 # MEM[0] = 1001 0000
20
21 lw $s0, 0($t0) # x = MEM[0]
22 lw $s1, 4($t0) # z = MEM[1*4]
23
24 sll $t1, $s0, 7 # t1 = x * 128
25 sub $s0, $t1, $s0 # x = t1 - x
26
27 sll $t2, $s1, 6 # t2 = z * 64
28 add $s1, $t2, $s1 # z = t2 + z
29
30 sub $s2, $s0, $s1 # y = x - z
31 addi $s2, $s2, 1 # y = y + 1
32
33 sw $s2, 8($t0) # MEM[2*4] = y
34
35 .data
36 x: .word 5
37 z: .word 7
38 y: .word 0
39 #fim
40
```

[illegible]

Programa 11

Edit Execute

Text Segment

Step	Address	Code	Basic	Source
	0x00000000	0x00000000	0x10, 0x10, 0x00, 0x00	MOVSI - 0000, 0001
	0x00000004	0x00000040	0x11, 0x, 0x, 0x	MOVSI - 0001, 0000
	0x00000008	0x00000000	0x12, 0x, 0x, 0x	MOVSI - 0001, 0001
	0x0000000c	0x00000004	0x13, 0x, 0x, 0x	MOVSI - 0001, 0004
	0x00000010	0x00000008	0x14, 0x, 0x, 0x	MOVSI - 0001, 0008
	0x00000014	0x0000000c	0x15, 0x, 0x, 0x	MOVSI - 0001, 000c
	0x00000018	0x00000010	0x16, 0x, 0x, 0x	MOVSI - 0001, 0010
	0x0000001c	0x00000014	0x17, 0x, 0x, 0x	MOVSI - 0001, 0014
	0x00000020	0x00000018	0x18, 0x, 0x, 0x	MOVSI - 0001, 0018
	0x00000024	0x0000001c	0x19, 0x, 0x, 0x	MOVSI - 0001, 001c
	0x00000028	0x00000020	0x1a, 0x, 0x, 0x	MOVSI - 0001, 0020
	0x0000002c	0x00000024	0x1b, 0x, 0x, 0x	MOVSI - 0001, 0024
	0x00000030	0x00000028	0x1c, 0x, 0x, 0x	MOVSI - 0001, 0028
	0x00000034	0x0000002c	0x1d, 0x, 0x, 0x	MOVSI - 0001, 002c
	0x00000038	0x00000030	0x1e, 0x, 0x, 0x	MOVSI - 0001, 0030
	0x0000003c	0x00000034	0x1f, 0x, 0x, 0x	MOVSI - 0001, 0034
	0x00000040	0x00000038	0x20, 0x, 0x, 0x	MOVSI - 0001, 0038
	0x00000044	0x0000003c	0x21, 0x, 0x, 0x	MOVSI - 0001, 003c
	0x00000048	0x00000040	0x22, 0x, 0x, 0x	MOVSI - 0001, 0040
	0x0000004c	0x00000044	0x23, 0x, 0x, 0x	MOVSI - 0001, 0044
	0x00000050	0x00000048	0x24, 0x, 0x, 0x	MOVSI - 0001, 0048
	0x00000054	0x0000004c	0x25, 0x, 0x, 0x	MOVSI - 0001, 004c
	0x00000058	0x00000050	0x26, 0x, 0x, 0x	MOVSI - 0001, 0050
	0x0000005c	0x00000054	0x27, 0x, 0x, 0x	MOVSI - 0001, 0054
	0x00000060	0x00000058	0x28, 0x, 0x, 0x	MOVSI - 0001, 0058
	0x00000064	0x0000005c	0x29, 0x, 0x, 0x	MOVSI - 0001, 005c
	0x00000068	0x00000060	0x2a, 0x, 0x, 0x	MOVSI - 0001, 0060
	0x0000006c	0x00000064	0x2b, 0x, 0x, 0x	MOVSI - 0001, 0064
	0x00000070	0x00000068	0x2c, 0x, 0x, 0x	MOVSI - 0001, 0068
	0x00000074	0x0000006c	0x2d, 0x, 0x, 0x	MOVSI - 0001, 006c
	0x00000078	0x00000070	0x2e, 0x, 0x, 0x	MOVSI - 0001, 0070
	0x0000007c	0x00000074	0x2f, 0x, 0x, 0x	MOVSI - 0001, 0074
	0x00000080	0x00000078	0x30, 0x, 0x, 0x	MOVSI - 0001, 0078
	0x00000084	0x0000007c	0x31, 0x, 0x, 0x	MOVSI - 0001, 007c
	0x00000088	0x00000080	0x32, 0x, 0x, 0x	MOVSI - 0001, 0080
	0x0000008c	0x00000084	0x33, 0x, 0x, 0x	MOVSI - 0001, 0084
	0x00000090	0x00000088	0x34, 0x, 0x, 0x	MOVSI - 0001, 0088
	0x00000094	0x0000008c	0x35, 0x, 0x, 0x	MOVSI - 0001, 008c
	0x00000098	0x00000090	0x36, 0x, 0x, 0x	MOVSI - 0001, 0090
	0x0000009c	0x00000094	0x37, 0x, 0x, 0x	MOVSI - 0001, 0094
	0x000000a0	0x00000098	0x38, 0x, 0x, 0x	MOVSI - 0001, 0098
	0x000000a4	0x0000009c	0x39, 0x, 0x, 0x	MOVSI - 0001, 009c
	0x000000a8	0x000000a0	0x3a, 0x, 0x, 0x	MOVSI - 0001, 00a0
	0x000000ac	0x000000a4	0x3b, 0x, 0x, 0x	MOVSI - 0001, 00a4


```

1  # programa 13
2
3  # Associações :
4  # t0 = MEM[0]
5  # A = $s0
6
7  #inicio
8  .text
9  .globl main
10 main:
11
12 ori $t0, $zero, 0x1001 # MEM[0] = 0000 1001
13 sll $t0, $t0, 16 # MEM[0] = 1001 0000
14
15 lw $s0, 0($t0) # A = MEM[0]
16 srl $t1, $s0, 28 # t1 = 0000 000f
17
18 ori $t2, $zero, 0x000f # t2 = 0000 000f
19 addi $t3, $zero, -1 # t3 = -1
20
21 bne $t1, $t2, nao # if(t1 != t2) nao:
22 mult $s0, $t3 # A = A * (-1)
23 mflo $s0 # A = low
24
25 nao:
26 sw $s0, 0($t0) # MEM[0] = A
27
28 .data
29 A: .word -10
30 #fim
31

```

Text Segment					Registers				
Addr	Address	Code	Basic	Source	Name	Number	Value		
0x00400000	0x00400000	ori \$t0, \$zero, 0x1001	12	ori \$t0, \$zero, 0x1001 # MEM[0] = 0000 1001	\$t0	0	0		
0x00400004	0x00400004	sll \$t0, \$t0, 16	13	sll \$t0, \$t0, 16 # MEM[0] = 1001 0000	\$t0	1	0		
0x00400008	0x00400008	lw \$s0, 0(\$t0)	15	lw \$s0, 0(\$t0) # A = MEM[0]	\$s0	2	0		
0x0040000c	0x0040000c	srl \$t1, \$s0, 28	16	srl \$t1, \$s0, 28 # t1 = 0000 000f	\$t1	3	0		
0x00400010	0x00400010	ori \$t2, \$zero, 0x000f	18	ori \$t2, \$zero, 0x000f # t2 = 0000 000f	\$t2	4	0		
0x00400014	0x00400014	addi \$t3, \$zero, -1	19	addi \$t3, \$zero, -1 # t3 = -1	\$t3	5	0		
0x00400018	0x00400018	bne \$t1, \$t2, nao	21	bne \$t1, \$t2, nao: # if(t1 != t2) nao:	\$t1	6	0		
0x0040001c	0x0040001c	mult \$s0, \$t3	22	mult \$s0, \$t3 # A = A * (-1)	\$s0	7	20000000		
0x00400020	0x00400020	mflo \$s0	23	mflo \$s0 # A = low	\$s0	8	15		
0x00400024	0x00400024	sw \$s0, 0(\$t0)	26	sw \$s0, 0(\$t0) # MEM[0] = A	\$t0	9	0		
0x00400028	0x00400028				\$t1	10	0		
0x0040002c	0x0040002c				\$t2	11	0		
0x00400030	0x00400030				\$t3	12	0		
0x00400034	0x00400034				\$s0	13	0		
0x00400038	0x00400038				\$s0	14	0		
0x0040003c	0x0040003c				\$s0	15	0		
0x00400040	0x00400040				\$s0	16	0		
0x00400044	0x00400044				\$s0	17	0		
0x00400048	0x00400048				\$s0	18	0		
0x0040004c	0x0040004c				\$s0	19	0		
0x00400050	0x00400050				\$s0	20	0		
0x00400054	0x00400054				\$s0	21	0		
0x00400058	0x00400058				\$s0	22	0		
0x0040005c	0x0040005c				\$s0	23	0		
0x00400060	0x00400060				\$s0	24	0		
0x00400064	0x00400064				\$s0	25	0		
0x00400068	0x00400068				\$s0	26	0		
0x0040006c	0x0040006c				\$s0	27	0		
0x00400070	0x00400070				\$s0	28	0		
0x00400074	0x00400074				\$s0	29	0		
0x00400078	0x00400078				\$s0	30	0		
0x0040007c	0x0040007c				\$s0	31	0		
0x00400080	0x00400080				\$s0	32	0		
0x00400084	0x00400084				\$s0	33	0		
0x00400088	0x00400088				\$s0	34	0		
0x0040008c	0x0040008c				\$s0	35	0		
0x00400090	0x00400090				\$s0	36	0		
0x00400094	0x00400094				\$s0	37	0		
0x00400098	0x00400098				\$s0	38	0		
0x0040009c	0x0040009c				\$s0	39	0		
0x004000a0	0x004000a0				\$s0	40	0		
0x004000a4	0x004000a4				\$s0	41	0		
0x004000a8	0x004000a8				\$s0	42	0		
0x004000ac	0x004000ac				\$s0	43	0		
0x004000b0	0x004000b0				\$s0	44	0		
0x004000b4	0x004000b4				\$s0	45	0		
0x004000b8	0x004000b8				\$s0	46	0		
0x004000bc	0x004000bc				\$s0	47	0		
0x004000c0	0x004000c0				\$s0	48	0		
0x004000c4	0x004000c4				\$s0	49	0		
0x004000c8	0x004000c8				\$s0	50	0		
0x004000cc	0x004000cc				\$s0	51	0		
0x004000d0	0x004000d0				\$s0	52	0		
0x004000d4	0x004000d4				\$s0	53	0		
0x004000d8	0x004000d8				\$s0	54	0		
0x004000dc	0x004000dc				\$s0	55	0		
0x004000e0	0x004000e0				\$s0	56	0		
0x004000e4	0x004000e4				\$s0	57	0		
0x004000e8	0x004000e8				\$s0	58	0		
0x004000ec	0x004000ec				\$s0	59	0		
0x004000f0	0x004000f0				\$s0	60	0		
0x004000f4	0x004000f4				\$s0	61	0		
0x004000f8	0x004000f8				\$s0	62	0		
0x004000fc	0x004000fc				\$s0	63	0		

Programa 14

EditExecute

mips9.asm mips10.asm mips11.asm mips12.asm mips13.asm mips14.asm

```

1  # programa 14
2
3  # Associações :
4  # t0 = MEM[0]
5  # MEM[1] = $s1
6  # A = $s0
7
8  #inicio
9  .text
10 .globl main
11 main:
12
13 ori $t0, $zero, 0x1001 # MEM[0] = 0000 1001
14 sll $t0, $t0, 16 # MEM[0] = 1001 0000
15
16 lw $s0, 0($t0) # A = MEM[0]
17
18 addi $t1, $zero, 2 # t1 = 2
19 div $s0, $t1 # $s0 / 2
20 mfhi $t2 # t3 = hi -> resto
21
22 addi $s1, $zero, 0 # $s1 = 0
23 beq $t2, $zero, par # if(t2 == 0) par
24 addi $s1, $zero, 1 # $s1 = 1
25
26 par:
27 sw $s1, 4($t0) # MEM[1*4] = 0 ou 1
28
29 .data
30 A: .word 101
31 #fim

```

Edit Execute				Registers		Capacit 1	Capacit 0	Value	
Text Segment				Name		Number	Value		
Step	Address	Code	Basic	Source					
	0x00000000	0x00000000	ori \$t0, \$zero, 0x1001 # MEM[0] = 0000 1001			\$t0	0		
	0x00000004	0x00000000	sll \$t0, \$t0, 16 # MEM[0] = 1001 0000			\$t0	1		
	0x00000008	0x00000000	lw \$s0, 0(\$t0) # A = MEM[0]			\$s0	2		
	0x0000000c	0x00000000	addi \$t1, \$zero, 2 # t1 = 2			\$t1	3		
	0x00000010	0x00000000	div \$s0, \$t1 # \$s0 / 2			\$s0	4		
	0x00000014	0x00000000	mfhi \$t2 # t3 = hi -> resto			\$t2	5		
	0x00000018	0x00000000	addi \$s1, \$zero, 0 # \$s1 = 0			\$s1	6		
	0x0000001c	0x00000000	beq \$t2, \$zero, par # if(t2 == 0) par			\$t2	7		
	0x00000020	0x00000000	addi \$s1, \$zero, 1 # \$s1 = 1			\$s1	8		
	0x00000024	0x00000000	sw \$s1, 4(\$t0) # MEM[1*4] = 0 ou 1			\$s1	9		
Data Segment									
Address	Value (+0)	Value (+4)	Value (+8)	Value (+c)	Value (+10)	Value (+14)	Value (+18)	Value (+1c)	
0x10010000	0	0	0	0	0	0	0	0	
0x10010004	0	0	0	0	0	0	0	0	
0x10010008	0	0	0	0	0	0	0	0	
0x1001000c	0	0	0	0	0	0	0	0	
0x10010010	0	0	0	0	0	0	0	0	
0x10010014	0	0	0	0	0	0	0	0	
0x10010018	0	0	0	0	0	0	0	0	
0x1001001c	0	0	0	0	0	0	0	0	
0x10010020	0	0	0	0	0	0	0	0	
0x10010024	0	0	0	0	0	0	0	0	
0x10010028	0	0	0	0	0	0	0	0	
0x1001002c	0	0	0	0	0	0	0	0	
0x10010030	0	0	0	0	0	0	0	0	
0x10010034	0	0	0	0	0	0	0	0	
0x10010038	0	0	0	0	0	0	0	0	
0x1001003c	0	0	0	0	0	0	0	0	
0x10010040	0	0	0	0	0	0	0	0	
0x10010044	0	0	0	0	0	0	0	0	
0x10010048	0	0	0	0	0	0	0	0	
0x1001004c	0	0	0	0	0	0	0	0	
0x10010050	0	0	0	0	0	0	0	0	
0x10010054	0	0	0	0	0	0	0	0	
0x10010058	0	0	0	0	0	0	0	0	
0x1001005c	0	0	0	0	0	0	0	0	
0x10010060	0	0	0	0	0	0	0	0	
0x10010064	0	0	0	0	0	0	0	0	
0x10010068	0	0	0	0	0	0	0	0	
0x1001006c	0	0	0	0	0	0	0	0	
0x10010070	0	0	0	0	0	0	0	0	
0x10010074	0	0	0	0	0	0	0	0	
0x10010078	0	0	0	0	0	0	0	0	
0x1001007c	0	0	0	0	0	0	0	0	
0x10010080	0	0	0	0	0	0	0	0	
0x10010084	0	0	0	0	0	0	0	0	
0x10010088	0	0	0	0	0	0	0	0	
0x1001008c	0	0	0	0	0	0	0	0	
0x10010090	0	0	0	0	0	0	0	0	
0x10010094	0	0	0	0	0	0	0	0	
0x10010098	0	0	0	0	0	0	0	0	
0x1001009c	0	0	0	0	0	0	0	0	
0x100100a0	0	0	0	0	0	0	0	0	
0x100100a4	0	0	0	0	0	0	0	0	
0x100100a8	0	0	0	0	0	0	0	0	
0x100100ac	0	0	0	0	0	0	0	0	
0x100100b0	0	0	0	0	0	0	0	0	
0x100100b4	0	0	0	0	0	0	0	0	
0x100100b8	0	0	0	0	0	0	0	0	
0x100100bc	0	0	0	0	0	0	0	0	
0x100100c0	0	0	0	0	0	0	0	0	
0x100100c4	0	0	0	0	0	0	0	0	
0x100100c8	0	0	0	0	0	0	0	0	
0x100100cc	0	0	0	0	0	0	0	0	
0x100100d0	0	0	0	0	0	0	0	0	
0x100100d4	0	0	0	0	0	0	0	0	
0x100100d8	0	0	0	0	0	0	0	0	
0x100100dc	0	0	0	0	0	0	0	0	
0x100100e0	0	0	0	0	0	0	0	0	
0x100100e4	0	0	0	0	0	0	0	0	
0x100100e8	0	0	0	0	0	0	0	0	
0x100100ec	0	0	0	0	0	0	0	0	
0x100100f0	0	0	0	0	0	0	0	0	
0x100100f4	0	0	0	0	0	0	0	0	
0x100100f8	0	0	0	0	0	0	0	0	
0x100100fc	0	0	0	0	0	0	0	0	
0x10010100	0	0	0	0	0	0	0	0	
0x10010104	0	0	0	0	0	0	0	0	
0x10010108	0	0	0	0	0	0	0	0	
0x1001010c	0	0	0	0	0	0	0	0	
0x10010110	0	0	0	0	0	0	0	0	
0x10010114	0	0	0	0	0	0	0	0	
0x10010118	0	0	0	0	0	0	0	0	
0x1001011c	0	0	0	0	0	0	0	0	
0x10010120	0	0	0	0	0	0	0	0	
0x10010124	0	0	0	0	0	0	0	0	
0x10010128	0	0	0	0	0	0	0	0	
0x1001012c	0	0	0	0	0	0	0	0	
0x10010130	0	0	0	0	0	0	0	0	
0x10010134	0	0	0	0	0	0	0	0	
0x10010138	0	0	0	0	0	0	0	0	
0x1001013c	0	0	0	0	0	0	0	0	
0x10010140	0	0	0	0	0	0	0	0	
0x10010144	0	0	0	0	0	0	0	0	
0x10010148	0	0	0	0	0	0	0	0	
0x1001014c	0	0	0	0	0	0	0	0	
0x10010150	0	0	0	0	0	0	0	0	
0x10010154	0	0	0	0	0	0	0	0	
0x10010158	0	0	0	0	0	0	0	0	
0x1001015c	0	0	0	0	0	0	0	0	
0x10010160	0	0	0	0	0	0	0	0	
0x10010164	0	0	0	0	0	0	0	0	
0x10010168	0	0	0	0	0	0	0	0	
0x1001016c	0	0	0	0	0	0	0	0	
0x10010170	0	0	0	0	0	0	0	0	
0x10010174	0	0	0	0	0	0	0	0	
0x10010178	0	0	0	0	0	0	0	0	
0x1001017c	0	0	0	0	0	0	0	0	
0x10010180	0	0	0	0	0	0	0	0	
0x10010184	0	0	0	0	0	0	0	0	
0x10010188	0	0	0	0	0	0	0	0	
0x1001018c	0	0	0	0	0	0	0	0	
0x10010190	0	0	0	0	0	0	0	0	
0x10010194	0	0	0	0	0	0	0	0	
0x10010198	0	0	0	0	0	0	0	0	
0x1001019c	0	0	0	0	0	0	0	0	
0x100101a0	0	0	0	0	0	0	0	0	
0x100101a4	0	0	0	0	0	0	0	0	
0x100101a8	0	0	0	0	0	0	0	0	
0x100101ac	0	0	0	0	0	0	0	0	
0x100101b0	0	0	0	0	0	0	0	0	
0x100101b4	0	0	0	0	0	0	0	0	
0x100101b8	0	0	0	0	0	0	0	0	
0x100101bc	0	0	0	0	0	0	0	0	
0x100101c0	0	0	0	0	0	0	0	0	
0x100101c4	0	0	0	0	0	0	0	0	
0x100101c8	0	0	0	0	0	0	0	0	
0x100101cc	0	0	0	0	0	0	0	0	
0x100101d0	0	0	0	0	0	0	0	0	
0x100101d4	0	0	0	0	0	0	0	0	
0x100101d8	0	0	0	0	0	0	0	0	
0x100101dc	0	0	0	0	0	0	0	0	
0x100101e0	0	0	0	0	0	0	0	0	
0x100101e4	0	0	0	0	0	0	0	0	
0x100101e8	0	0	0	0	0	0	0	0	
0x100101ec	0	0	0	0	0	0	0	0	
0x100101f0	0	0	0	0	0	0	0	0	
0x100101f4	0	0	0	0	0	0	0	0	
0x100101f8	0	0	0	0	0	0	0	0	
0x100101fc	0	0	0	0	0	0	0	0	
0x10010200	0	0	0	0	0	0	0	0	
0x10010204	0	0	0	0	0	0	0	0	
0x10010208	0	0	0	0	0	0	0	0	
0x1001020c	0	0	0	0	0	0	0	0	
0x10010210	0	0	0	0	0	0	0	0	
0x10010214	0	0	0	0	0	0	0	0	
0x10010218	0	0	0	0	0	0	0	0	
0x1001021c	0	0	0	0	0	0	0	0	
0x10010220	0	0	0	0	0	0	0	0	
0x10010224	0	0	0	0	0	0	0	0	
0x10010228	0	0	0	0	0	0	0	0	
0x1001022c	0	0	0	0	0	0	0	0	
0x10010230	0	0	0	0	0	0	0	0	
0x10010234	0	0	0	0	0	0	0	0	
0x10010238	0	0	0	0	0	0	0	0	
0x1001023c	0	0	0	0	0	0	0	0	
0x10010240	0	0	0	0	0	0	0	0	
0x10010244	0	0	0	0	0	0	0	0	
0x10010248	0	0	0	0	0	0	0	0	
0x1001024c	0	0	0	0	0	0	0	0	
0x10010250	0	0	0	0	0	0	0	0	
0x10010254	0	0	0	0	0	0	0	0	
0x10010258	0	0	0	0	0	0	0	0	
0x1001025c	0	0	0	0	0	0	0	0	
0x10010260	0	0	0	0	0	0	0	0	
0x10010264	0	0	0	0	0	0	0	0	
0x10010268	0	0	0	0	0	0	0	0	
0x1001026c	0	0	0	0	0	0	0	0	
0x10010270	0	0	0	0	0	0	0	0	
0x10010274	0	0	0	0	0	0	0	0	
0x10010278	0	0	0	0	0	0	0	0	
0x1001027c	0	0	0	0	0	0	0	0	
0x10010280	0	0	0	0	0	0	0	0	
0x10010284	0	0	0	0	0	0	0	0	
0x10010288	0	0	0	0	0	0	0	0	
0x1001028c	0	0	0	0	0	0	0	0	
0x10010290	0	0	0	0	0	0	0	0	
0x10010294	0	0	0	0	0	0	0	0	
0x10010298	0	0	0	0	0	0	0	0	
0x1001029c	0	0	0	0	0	0	0	0	
0x100102a0									


```

Edit Execute
mips9.asm mips10.asm mips11.asm mips12.asm mips13.asm mips14.asm mips15.asm mips16.asm
1 # ((0x186A00*0x13880)/0x61A80)
2
3 # Associações :
4 # x = $s0
5 # y = $s1
6 # z = $s2
7 # resultado = $s3
8
9 #inicio
10 .text
11 .globl main
12 main:
13 ori $s0, $zero, 0x186a # x = 0000 186a
14 sll $s0, $s0, 8 # x = 0018 6a00
15 ori $s1, $zero, 0x1388 # y = 0000 1388
16 sll $s1, $s1, 4 # y = 0001 3880
17 ori $s2, $zero, 0x61a8 # y = 0000 61a8
18 sll $s2, $s2, 4 # y = 0006 1a80
19
20 mult $s0, $s1 # x * y
21 mflo $t0 # t0 = cd65 0000
22 srl $t0, $t0, 16 # t0 = 0000 cd65
23 mfhi $t1 # t1 = 0000 001d
24 sll $t1, $t1, 16 # t1 = 001d 0000
25
26 add $t3, $t0, $t1 # t3 = t0 + t1 -> 001d cd65
27 sll $t3, $t3, 8 # t3 / 256
28 div $t3, $s2 # (t3) / z
29 mflo $s3 # z = 0000 04e2
30 sll $s3, $s3, 8 # s3 * 256
31 #fim
32

```

File				Disassemble		Registers		Copro 1		Copro 0	
Text Segment				Data Segment		Name		Number		Value	
Step	Address	Code	Basic	Source							
0	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$zero	0	0		0	
1	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$s0	1	0		0	
2	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$s1	2	0		0	
3	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$s2	3	0		0	
4	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$s3	4	0		0	
5	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t0	5	0		0	
6	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t1	6	0		0	
7	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t2	7	0		0	
8	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t3	8	0		0	
9	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t4	9	0		0	
10	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t5	10	0		0	
11	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t6	11	0		0	
12	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t7	12	0		0	
13	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t8	13	0		0	
14	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t9	14	0		0	
15	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t10	15	0		0	
16	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t11	16	0		0	
17	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t12	17	0		0	
18	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t13	18	0		0	
19	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t14	19	0		0	
20	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t15	20	0		0	
21	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t16	21	0		0	
22	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t17	22	0		0	
23	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t18	23	0		0	
24	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t19	24	0		0	
25	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t20	25	0		0	
26	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t21	26	0		0	
27	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t22	27	0		0	
28	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t23	28	0		0	
29	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t24	29	0		0	
30	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t25	30	0		0	
31	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t26	31	0		0	
32	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t27	32	0		0	
33	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t28	33	0		0	
34	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t29	34	0		0	
35	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t30	35	0		0	
36	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t31	36	0		0	
37	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t32	37	0		0	
38	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t33	38	0		0	
39	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t34	39	0		0	
40	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t35	40	0		0	
41	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t36	41	0		0	
42	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t37	42	0		0	
43	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t38	43	0		0	
44	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t39	44	0		0	
45	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t40	45	0		0	
46	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t41	46	0		0	
47	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t42	47	0		0	
48	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t43	48	0		0	
49	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t44	49	0		0	
50	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t45	50	0		0	
51	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t46	51	0		0	
52	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t47	52	0		0	
53	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t48	53	0		0	
54	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t49	54	0		0	
55	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t50	55	0		0	
56	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t51	56	0		0	
57	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t52	57	0		0	
58	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t53	58	0		0	
59	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t54	59	0		0	
60	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t55	60	0		0	
61	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t56	61	0		0	
62	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t57	62	0		0	
63	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t58	63	0		0	
64	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t59	64	0		0	
65	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t60	65	0		0	
66	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t61	66	0		0	
67	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t62	67	0		0	
68	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t63	68	0		0	
69	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t64	69	0		0	
70	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t65	70	0		0	
71	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t66	71	0		0	
72	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t67	72	0		0	
73	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t68	73	0		0	
74	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t69	74	0		0	
75	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t70	75	0		0	
76	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t71	76	0		0	
77	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t72	77	0		0	
78	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t73	78	0		0	
79	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t74	79	0		0	
80	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t75	80	0		0	
81	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t76	81	0		0	
82	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t77	82	0		0	
83	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t78	83	0		0	
84	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t79	84	0		0	
85	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t80	85	0		0	
86	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t81	86	0		0	
87	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t82	87	0		0	
88	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t83	88	0		0	
89	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t84	89	0		0	
90	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t85	90	0		0	
91	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t86	91	0		0	
92	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t87	92	0		0	
93	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t88	93	0		0	
94	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t89	94	0		0	
95	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t90	95	0		0	
96	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t91	96	0		0	
97	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t92	97	0		0	
98	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t93	98	0		0	
99	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t94	99	0		0	
100	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	\$t95	100	0		0	
101	0x00000000										

EditExecute

mips9.asm

mips10.asm

mips11.asm

mips12.asm

mips13.asm

mips14.asm

mips15.asm

mips16.asm

mips17.asm

```

1  # programa 17
2
3  # Associações :
4  # t0 = MEM[0]
5  # x = $s0
6  # y = $s1
7  # k = $s2
8
9  #inicio
10 .text
11 .globl main
12 main:
13 ori $t0, $zero, 0x1001 # MEM[0] = 0000 1001
14 sll $t0, $t0, 16 # MEM[0] = 1001 0000
15
16 lw $s0, 0($t0) # x = MEM[0]
17 lw $s1, 4($t0) # y = MEM[1*4]
18
19 addi $t1, $zero, 0 # i = 0
20
21 do:
22 add $s2, $s2, $s0 # k = k + x
23 addi $t1, $t1, 1 # i++
24
25 bne $t1, $s1, do # while ( i != y)
26
27 sw $s2, 8($t0) # y = MEM[2*4]
28
29 .data
30 x: .word 2
31 y: .word 5
32 k: .word -1
33 #fim
34 |

```

Text Segment

Addr	Address	Code	Basic	Source
0	0x00400000	0x34801001	ori \$t0, \$zero, 0x1001	# MEM[0] = 0000 1001
1	0x00400004	0x00000016	sll \$t0, \$t0, 16	# MEM[0] = 1001 0000
2	0x00400008	0x8c200000	lw \$s0, 0(\$t0)	# x = MEM[0]
3	0x0040000c	0x8c200004	lw \$s1, 4(\$t0)	# y = MEM[1*4]
4	0x00400010	0x00000000	addi \$t1, \$zero, 0	# i = 0
5	0x00400014	0x00000000	add \$s2, \$s2, \$s0	# k = k + x
6	0x00400018	0x00000001	addi \$t1, \$t1, 1	# i++
7	0x0040001c	0x00000000	bne \$t1, \$s1, do	# while (i != y)
8	0x00400020	0x00000000	sw \$s2, 8(\$t0)	# y = MEM[2*4]
9	0x00400024	0x00000000		
10	0x00400028	0x00000000		
11	0x0040002c	0x00000000		
12	0x00400030	0x00000000		
13	0x00400034	0x00000000		
14	0x00400038	0x00000000		
15	0x0040003c	0x00000000		
16	0x00400040	0x00000000		
17	0x00400044	0x00000000		
18	0x00400048	0x00000000		
19	0x0040004c	0x00000000		
20	0x00400050	0x00000000		
21	0x00400054	0x00000000		
22	0x00400058	0x00000000		
23	0x0040005c	0x00000000		
24	0x00400060	0x00000000		
25	0x00400064	0x00000000		
26	0x00400068	0x00000000		
27	0x0040006c	0x00000000		
28	0x00400070	0x00000000		
29	0x00400074	0x00000000		
30	0x00400078	0x00000000		
31	0x0040007c	0x00000000		
32	0x00400080	0x00000000		
33	0x00400084	0x00000000		
34	0x00400088	0x00000000		
35	0x0040008c	0x00000000		
36	0x00400090	0x00000000		
37	0x00400094	0x00000000		
38	0x00400098	0x00000000		
39	0x0040009c	0x00000000		
40	0x004000a0	0x00000000		
41	0x004000a4	0x00000000		
42	0x004000a8	0x00000000		
43	0x004000ac	0x00000000		
44	0x004000b0	0x00000000		
45	0x004000b4	0x00000000		
46	0x004000b8	0x00000000		
47	0x004000bc	0x00000000		
48	0x004000c0	0x00000000		
49	0x004000c4	0x00000000		
50	0x004000c8	0x00000000		
51	0x004000cc	0x00000000		
52	0x004000d0	0x00000000		
53	0x004000d4	0x00000000		
54	0x004000d8	0x00000000		
55	0x004000dc	0x00000000		
56	0x004000e0	0x00000000		
57	0x004000e4	0x00000000		
58	0x004000e8	0x00000000		
59	0x004000ec	0x00000000		
60	0x004000f0	0x00000000		
61	0x004000f4	0x00000000		
62	0x004000f8	0x00000000		
63	0x004000fc	0x00000000		
64	0x00400100	0x00000000		
65	0x00400104	0x00000000		
66	0x00400108	0x00000000		
67	0x0040010c	0x00000000		
68	0x00400110	0x00000000		
69	0x00400114	0x00000000		
70	0x00400118	0x00000000		
71	0x0040011c	0x00000000		
72	0x00400120	0x00000000		
73	0x00400124	0x00000000		
74	0x00400128	0x00000000		
75	0x0040012c	0x00000000		
76	0x00400130	0x00000000		
77	0x00400134	0x00000000		
78	0x00400138	0x00000000		
79	0x0040013c	0x00000000		
80	0x00400140	0x00000000		
81	0x00400144	0x00000000		
82	0x00400148	0x00000000		
83	0x0040014c	0x00000000		
84	0x00400150	0x00000000		
85	0x00400154	0x00000000		
86	0x00400158	0x00000000		
87	0x0040015c	0x00000000		
88	0x00400160	0x00000000		
89	0x00400164	0x00000000		
90	0x00400168	0x00000000		
91	0x0040016c	0x00000000		
92	0x00400170	0x00000000		
93	0x00400174	0x00000000		
94	0x00400178	0x00000000		
95	0x0040017c	0x00000000		
96	0x00400180	0x00000000		
97	0x00400184	0x00000000		
98	0x00400188	0x00000000		
99	0x0040018c	0x00000000		
100	0x00400190	0x00000000		
101	0x00400194	0x00000000		
102	0x00400198	0x00000000		
103	0x0040019c	0x00000000		
104	0x004001a0	0x00000000		
105	0x004001a4	0x00000000		
106	0x004001a8	0x00000000		
107	0x004001ac	0x00000000		
108	0x004001b0	0x00000000		
109	0x004001b4	0x00000000		
110	0x004001b8	0x00000000		
111	0x004001bc	0x00000000		
112	0x004001c0	0x00000000		
113	0x004001c4	0x00000000		
114	0x004001c8	0x00000000		
115	0x004001cc	0x00000000		
116	0x004001d0	0x00000000		
117	0x004001d4	0x00000000		
118	0x004001d8	0x00000000		
119	0x004001dc	0x00000000		
120	0x004001e0	0x00000000		
121	0x004001e4	0x00000000		
122	0x004001e8	0x00000000		
123	0x004001ec	0x00000000		
124	0x004001f0	0x00000000		
125	0x004001f4	0x00000000		
126	0x004001f8	0x00000000		
127	0x004001fc	0x00000000		
128	0x00400200	0x00000000		
129	0x00400204	0x00000000		
130	0x00400208	0x00000000		
131	0x0040020c	0x00000000		
132	0x00400210	0x00000000		
133	0x00400214	0x00000000		
134	0x00400218	0x00000000		
135	0x0040021c	0x00000000		
136	0x00400220	0x00000000		
137	0x00400224	0x00000000		
138	0x00400228	0x00000000		
139	0x0040022c	0x00000000		
140	0x00400230	0x00000000		
141	0x00400234	0x00000000		
142	0x00400238	0x00000000		
143	0x0040023c	0x00000000		
144	0x00400240	0x00000000		
145	0x00400244	0x00000000		
146	0x00400248	0x00000000		
147	0x0040024c	0x00000000		
148	0x00400250	0x00000000		
149	0x00400254	0x00000000		
150	0x00400258	0x00000000		
151	0x0040025c	0x00000000		
152	0x00400260	0x00000000		
153	0x00400264	0x00000000		
154	0x00400268	0x00000000		
155	0x0040026c	0x00000000		
156	0x00400270	0x00000000		
157	0x00400274	0x00000000		
158	0x00400278	0x00000000		
159	0x0040027c	0x00000000		
160	0x00400280	0x00000000		
161	0x00400284	0x00000000		
162	0x00400288	0x00000000		
163	0x0040028c	0x00000000		
164	0x00400290	0x00000000		
165	0x00400294	0x00000000		
166	0x00400298	0x00000000		
167	0x0040029c	0x00000000		
168	0x004002a0	0x00000000		
169	0x004002a4	0x00000000		
170	0x004002a8	0x00000000		
171	0x004002ac	0x00000000		
172	0x004002b0	0x00000000		
173	0x004002b4	0x00000000		
174	0x004002b8	0x00000000		
175	0x004002bc	0x00000000		
176	0x004002c0	0x00000000		
177	0x004002c4	0x00000000		
178	0x004002c8	0x00000000		
179	0x004002cc	0x00000000		
180	0x004002d0	0x00000000		
181	0x004002d4	0x00000000		
182	0x004002d8	0x00000000		
183	0x004002dc	0x00000000		
184	0x004002e0	0x00000000		
185	0x004002e4	0x00000000		
186	0x004002e8	0x00000000		
187	0x004002ec	0x00000000		
188	0x004002f0	0x00000000		
189	0x004002f4	0x00000000		
190	0x004002f8	0x00000000		
191	0x004002fc	0x00000000		
192	0x00400300	0x00000000		
193	0x00400304	0x00000000		
194	0x00400308	0x00000000		
195	0x0040030c	0x00000000		
196	0x00400310	0x00000000		
197	0x00400314	0x00000000		
198	0x00400318	0x00000000		
199	0x0040031c	0x00000000		
200	0x00400320	0x00000000		
201	0x00400324	0x00000000		
202	0x00400328	0x00000000</		

EditExecute

mips9.asm

mips10.asm

mips11.asm

mips12.asm

mips13.asm

mips14.asm

mips15.asm

mips16.asm

mips17.asm

mips18.asm

```

1  # programa 18
2
3  # Associações :
4  # t0 = MEM[0]
5  # x = $s0
6  # y = $s1
7  # k = $s2
8
9  #inicio
10 .text
11 .globl main
12 main:
13
14 ori $t0, $zero, 0x1001 # MEM[0] = 0000 1001
15 sll $t0, $t0, 16 # MEM[0] = 1001 0000
16
17 lw $s0, 0($t0) # x = MEM[0]
18 lw $s1, 4($t0) # y = MEM[1*4]
19
20 addi $t1, $zero, 0 # i = 0
21 addi $s2, $zero, 1 # k = 1
22
23 do:
24 mult $s2, $s0 # k * x
25 mflo $s2 # k = lo
26 addi $t1, $t1, 1 # i++
27
28 bne $t1, $s1, do # while ( i != y)
29
30 sw $s2, 8($t0) # k = MEM[2*4]
31
32 .data
33 x: .word 3
34 y: .word 4
35 k: .word -1
36 #fim
37

```

EditExecute

Text Segment

Offset	Address	Code	Basic	Source
0x00000000	0x00000000	ori \$t0, \$zero, 0x1001	14	ori \$t0, \$zero, 0x1001 # MEM[0] = 0000 1001
0x00000004	0x00000004	sll \$t0, \$t0, 16	15	sll \$t0, \$t0, 16 # MEM[0] = 1001 0000
0x00000008	0x00000008	lw \$s0, 0(\$t0)	17	lw \$s0, 0(\$t0) # x = MEM[0]
0x0000000c	0x0000000c	lw \$s1, 4(\$t0)	18	lw \$s1, 4(\$t0) # y = MEM[1*4]
0x00000010	0x00000010	addi \$t1, \$zero, 0	20	addi \$t1, \$zero, 0 # i = 0
0x00000014	0x00000014	addi \$s2, \$zero, 1	21	addi \$s2, \$zero, 1 # k = 1
0x00000018	0x00000018	mult \$s2, \$s0	24	mult \$s2, \$s0 # k * x
0x0000001c	0x0000001c	mflo \$s2	25	mflo \$s2 # k = lo
0x00000020	0x00000020	addi \$t1, \$t1, 1	26	addi \$t1, \$t1, 1 # i++
0x00000024	0x00000024	bne \$t1, \$s1, do	28	bne \$t1, \$s1, do # while (i != y)
0x00000028	0x00000028	sw \$s2, 8(\$t0)	30	sw \$s2, 8(\$t0) # k = MEM[2*4]

Registers

Coproc 1

Coproc 0

Register	Name	Number	Value
\$zero		0	0
\$at		1	0
\$a0		2	0
\$a1		3	0
\$a2		4	0
\$a3		5	0
\$a4		6	0
\$a5		7	0
\$a6		8	20000000
\$a7		9	0
\$t0		10	0
\$t1		11	0
\$t2		12	0
\$t3		13	0
\$t4		14	0
\$t5		15	0
\$t6		16	0
\$t7		17	0
\$s0		18	0
\$s1		19	0
\$s2		20	0
\$s3		21	0
\$s4		22	0
\$s5		23	0
\$s6		24	0
\$s7		25	0
\$s8		26	0
\$s9		27	0
\$t0		28	20000000
\$t1		29	2147483648
\$t2		30	0
\$t3		31	4194304
\$t4		32	0
\$t5		33	0
\$t6		34	0
\$t7		35	0
\$s0		36	0
\$s1		37	0
\$s2		38	0
\$s3		39	0
\$s4		40	0
\$s5		41	0
\$s6		42	0
\$s7		43	0
\$s8		44	0
\$s9		45	0
\$t0		46	0
\$t1		47	0
\$t2		48	0
\$t3		49	0
\$t4		50	0
\$t5		51	0
\$t6		52	0
\$t7		53	0
\$s0		54	0
\$s1		55	0
\$s2		56	0
\$s3		57	0
\$s4		58	0
\$s5		59	0
\$s6		60	0
\$s7		61	0
\$s8		62	0
\$s9		63	0

Data Segment

Address	Value (x0)	Value (x4)	Value (x8)	Value (x1)	Value (x10)	Value (x10)	Value (x10)	Value (x10)
0x10000000	0	0	0	0	0	0	0	0
0x10000004	0	0	0	0	0	0	0	0
0x10000008	0	0	0	0	0	0	0	0
0x1000000c	0	0	0	0	0	0	0	0
0x10000010	0	0	0	0	0	0	0	0
0x10000014	0	0	0	0	0	0	0	0
0x10000018	0	0	0	0	0	0	0	0
0x1000001c	0	0	0	0	0	0	0	0
0x10000020	0	0	0	0	0	0	0	0
0x10000024	0	0	0	0	0	0	0	0
0x10000028	0	0	0	0	0	0	0	0
0x1000002c	0	0	0	0	0	0	0	0
0x10000030	0	0	0	0	0	0	0	0
0x10000034	0	0	0	0	0	0	0	0
0x10000038	0	0	0	0	0	0	0	0
0x1000003c	0	0	0	0	0	0	0	0
0x10000040	0	0	0	0	0	0	0	0
0x10000044	0	0	0	0	0	0	0	0
0x10000048	0	0	0	0	0	0	0	0
0x1000004c	0	0	0	0	0	0	0	0
0x10000050	0	0	0	0	0	0	0	0
0x10000054	0	0	0	0	0	0	0	0
0x10000058	0	0	0	0	0	0	0	0
0x1000005c	0	0	0	0	0	0	0	0

Programa desafio

mips9.asm

mips10.asm

mips11.asm

mips12.asm

mips13.asm

mips14.asm

mips15.asm

mips16.asm

mips17.asm

mips18.asm

desafio.asm

```

1  # programa desafio
2
3  #li $a0, 5 #load imediato
4  #li $a1, 3
5
6  #inicio
7  .text
8  .globl main
9  main:
10
11 ori $t0, $zero, 0x1001 # MEM[0] = 0000 1001
12 sll $t0, $t0, 16 # MEM[0] = 1001 0000
13
14 lw $a0, 0($t0) # x = MEM[0]
15 lw $a1, 4($t0) # y = MEM[1*4]
16
17 mult $a0, $a1
18 mfhi $a2 # 32 most significant bits of multiplication to $a2
19 mflo $a3 # 32 least significant bits of multiplication to $a3
20
21 .data
22 x: .word 50000
23 y: .word 10000
24
25 #fim

```

[illegible]