

EXERCÍCIO 9A

File Edit Run Settings Tools Help

Run speed at max (no interaction)

Edit Execute

Exercício9A.asm

```
1 .text
2 li $a0, 15
3 li $a1, 20
4 li $a2, 10
5 li $a3, 5
6
7 .loop:
8 addi $sp, $sp, -12
9 sw $t1, 8($sp)
10 sw $t0, 4($sp)
11 sw $a0, 0($sp)
12
13 add $t0, $a0, $a1
14 add $t1, $a2, $a3
15 sub $s0, $t0, $t1
16 add $v0, $a0, $zero
17
18 lw $a0, 0($sp)
19 lw $t0, 4($sp)
20 lw $t1, 8($sp)
21 addi $sp, $sp, 12
22
23 jr $ra
```

Line: 23 Column: 7 Show Line Numbers

Mars Messages Run I/O

Assemble: assemble /home/lobato/Área de Trabalho/Lucas/UEU/8º PERÍODO/Arquitetura de Computadores 1/Instruções: A linguagem dos computadores - Ferramenta MARS/Exercício9A.asm

Assemble: operation completed successfully.

Go: running Exercício9A.asm

Clear

Error in : invalid program counter value: 0x00000000

Go: execution terminated with errors.

Registers Coproc 1 Coproc 0

Name	Number	Value
\$0 (\$addr)	8	0x00000000
\$12 (status)	12	0x0000ff13
\$13 (cause)	13	0x00000010
\$14 (epc)	14	0x00000000

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Text Segment

Bkpt	Address	Code	Basic	Source
	0x00400000	0x2404000f addiu \$4,\$0,0x0000000f	2: li \$a0, 15	
	0x00400004	0x24050014 addiu \$5,\$0,0x00000014	3: li \$a1, 20	
	0x00400008	0x2406000a addiu \$6,\$0,0x0000000a	4: li \$a2, 10	
	0x0040000c	0x24070005 addiu \$7,\$0,0x00000005	5: li \$a3, 5	
	0x00400010	0x230ffff4 addi \$29,\$29,0xffff	8: addi \$sp, \$sp, -12	
	0x00400014	0xafaf90008 sw \$9,0x00000008(\$29)	9: sw \$t1, 8(\$sp)	
	0x00400018	0xafaf80004 sw \$8,0x00000004(\$29)	10: sw \$t0, 4(\$sp)	
	0x0040001c	0xafb00000 sw \$16,0x00000000(\$29)	11: sw \$s0, 0(\$sp)	
	0x00400020	0x00854020 add \$8,\$4,\$5	13: add \$t0, \$a0, \$a1	
	0x00400024	0x00c74820 add \$9,\$4,\$7	14: add \$t1, \$a2, \$a3	
	0x00400028	0x01088020 sub \$16,\$8,\$9	15: sub \$s0, \$t0, \$t1	
	0x0040002c	0x02001020 add \$2,\$16,\$0	16: add \$v0, \$a0, \$zero	
	0x00400030	0x8f8f00000 lw \$16,0x00000000(\$29)	18: lw \$s0, 0(\$sp)	
	0x00400034	0x8f8f00004 lw \$9,0x00000004(\$29)	19: lw \$t0, 4(\$sp)	
	0x00400038	0x8f8f90008 lw \$9,0x00000008(\$29)	20: lw \$t1, 8(\$sp)	
	0x0040003c	0x2304000c addi \$29,\$29,0x0000...	21: addi \$sp, \$sp, 12	
	0x00400040	0x23040008 jr \$ra	23: jr \$ra	

Data Segment

Address	Value (+0)	Value (+4)	Value (+8)	Value (+c)	Value (+10)	Value (+14)	Value (+18)	Value (+1c)
0x10010000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x10010020	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x10010040	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x10010060	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x10010080	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x100100a0	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x100100c0	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x100100e0	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x10010100	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x10010120	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x10010140	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x10010160	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x10010180	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x100101a0	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x100101c0	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x100101e0	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000

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