

Guilherme Henrique Gonçalves Silva

## LISTA 16

### LISTA 16. EXERCÍCIO 1

R: Mem / stack

1200: 666

1196: 5

1192: 132

1188: 666

1184: 3

1180: 56

1176: 3

1172: 1

1168: 56

1164: 1

1160: 0

1156: 56

1152: 1

Registadores

\$pc: 148

\$ra: 132

\$rp: 1200

\$a0: 5

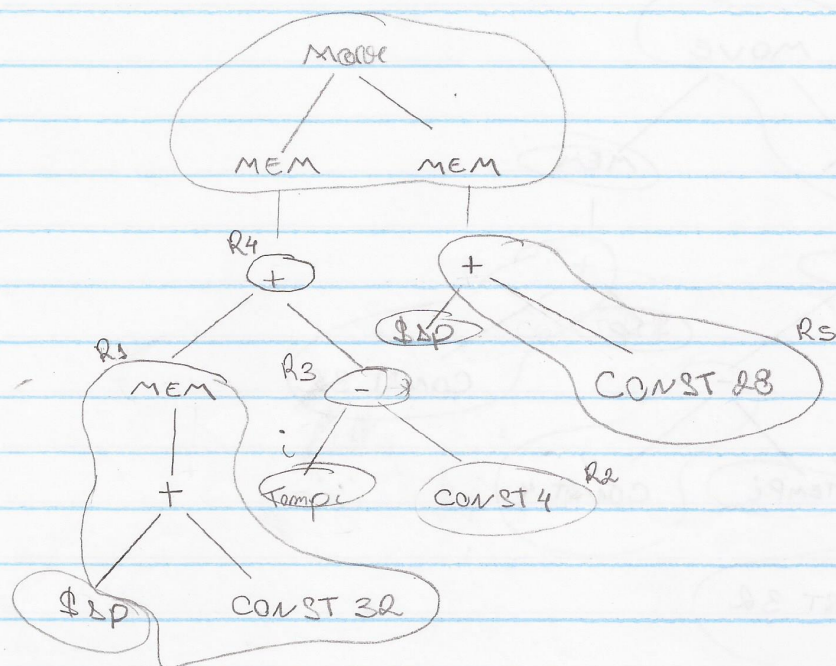
\$v0: 666

\$s0: 666

\$s1: 666

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# LISTA-17-EXERCICIO-1-LETRA-a



Load R1 & M[2p+32]

ADDI R2 & R0 + 4

SUB R3 & i - R2

ADDI R4 & R1 + R3

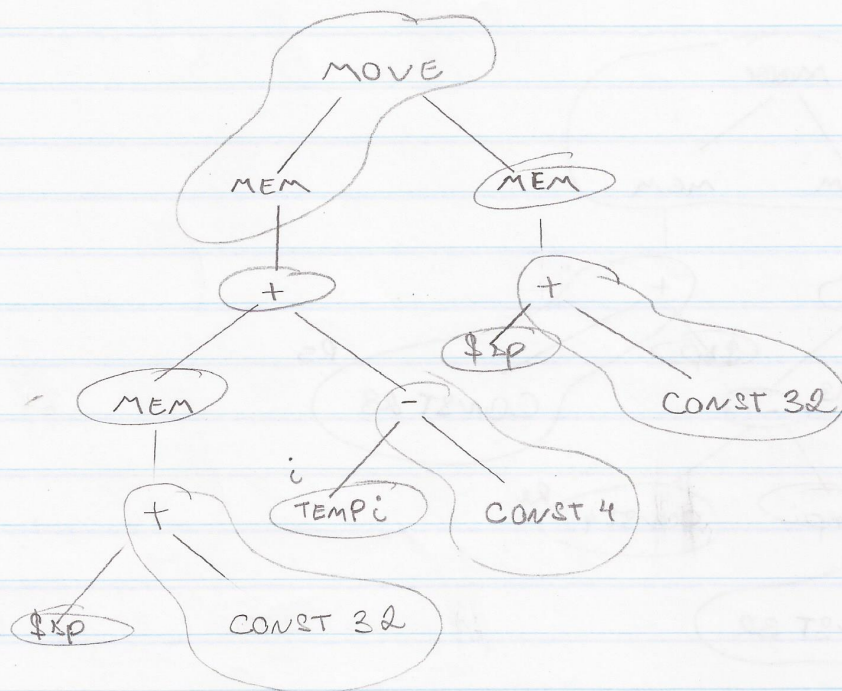
ADDI R5 & 2p + 28

MOVEM M[R4] & M[R5]



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LISTA 17. EXERCÍCIO 1. LETRA - b



ANDI R1 ← \$sp, 32

LW R2 ← 0(R1)

ANDI R3 ← Temp, -4

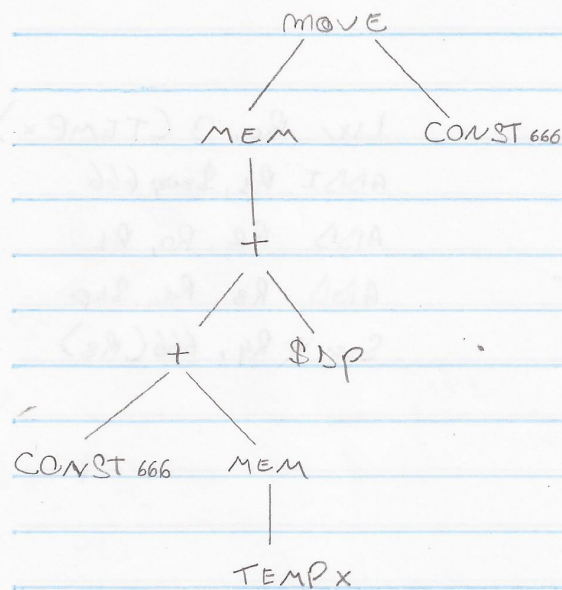
ADD R4 ← R2, R3

ANDI R5 ← \$sp, 28

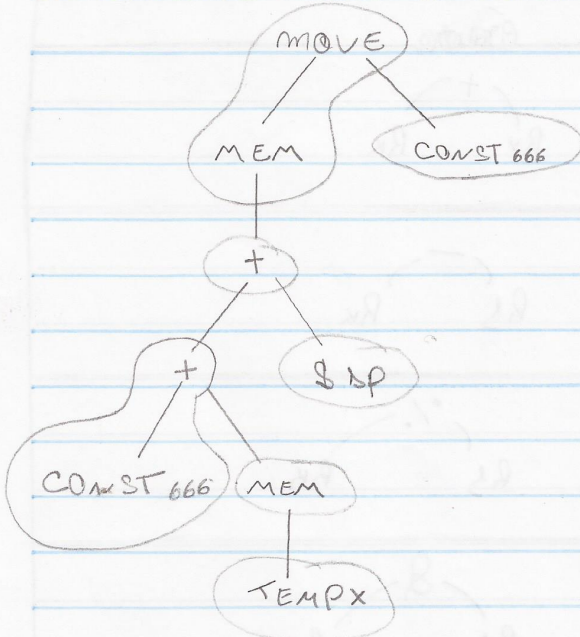
LW R6 ← 0(R5)

SW R5 ← 0(R3)

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LISTA-17-EXERCICIO-2-LETRA-a



LISTA-17-EXERCICIO-2-LETRA.b



Lw R0, 0 (TEMPX)

ADDI R1, R0, 666

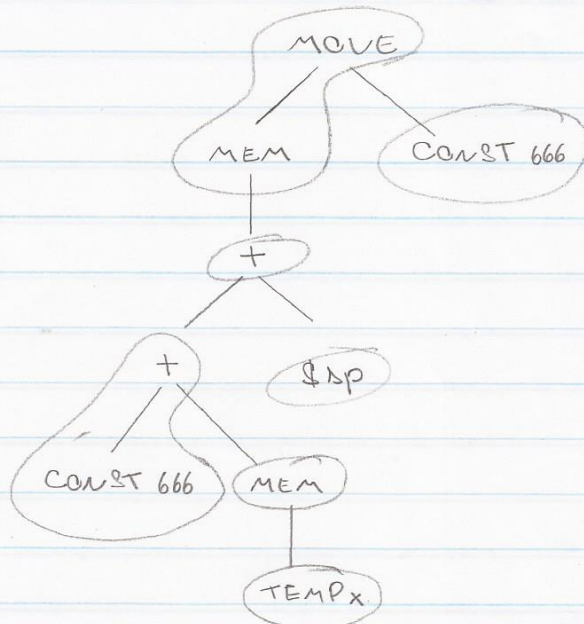
AND R2, R1, \$SP

Sw R3, R2, 666



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# LISTA 17 - EXERCICIO - 2. LETRA C



Lex R0, 0 (TEMPx)

ADDI R1, \$zero, 666

AND R2, R0, R1

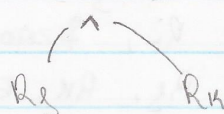
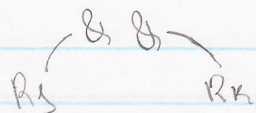
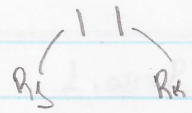


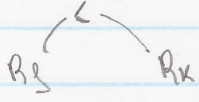
ADD R3, R2, \$sp

Sw R4, 666(R3)

## LISTA 17 - EXERCICIO 3

	Instrução	Árvore
+	ADD Ri Rj Rk	
-	Sub Ri Rj Rk	
%	Div Rj Rk MFHi Ri	
&	AND Ri Rj Rk	
	OR Ri Rj Rk	

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	Instrução	Arvore
^	XOR Ri, Rs, Rk	
&&	ADDI Ri, \$zero, 0 Bge Rs, \$zero, end Bge Rk, \$zero, end ADDI Ri, Ri, 1 END:	
	ADDI Ri, \$zero, 1 BNE Rs, \$zero, end BNE Rk, \$zero, end ADDI Ri, Ri, -1 END:	
==	ADDI Ri, \$zero, 0 BNE Rs, Rk, END ADDI Ri, Ri, 1 END:	
!=	ADDI Ri, \$zero, 0 BEQ Rs, Rk, END ADDI Ri, Ri, 1 END:	
<	SLT Ri, Rs, Rk	



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	Instruções	Árvore
>	ADDI Ri, \$zero, 1 BGT Rs, Rk, END ADDI Ri, Ri, -1 END:	
<=	ADDI Ri, \$zero, 1 BLE Rs, Rk, END ADDI Ri, Ri, -1 END:	
>=	ADDI Ri, \$zero, 1 BGE Rs, Rk, END ADDI Ri, Ri, -1 END:	
>>	SRL Ri, Rs, C	
<<	SLL Ri, Rs, C	

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## LISTA 18 - EXERCÍCIO 1

addi r, \$zero, -1

Label-while-test

Label-while:

addi a, \$vo, \$zero

addi b, \$vo, \$zero

addi c, \$vo, \$zero

add r1, b, c

add r2, a, c

add r3, a, b

SLT r4, a, r1

BEQ r4, \$zero, Label-while-test

SLT r4, c, r3

BEQ r4, \$zero, Label-while-test

BNE a, b, equal 1-the

BNE b, c, equal 1-the

addi r, \$zero, \$zero; Label-while-test

equal 1-the:

BEQ a, b, equal 2

BEQ a, c, equal 2

BEQ c, b, equal 2

addi r, \$zero, 2; Label-while-test

equal 2:

addi r, \$zero, 1

Label-while-test:

BEQ r, -1, Label-while