

0x00400000	0x3c011001	lui \$1,0x00001001	14: main: la \$a0, prompt # \$a0 = prompt
0x00400004	0x3424001f	ori \$4,\$1,0x0000001f	
0x00400008	0x24020004	addiu \$2,\$0,0x00000004	15: li \$v0, 4 # \$v0 = 4 (syscall "print str")
0x0040000c	0x0000000c	syscall	# print str(prompt)
0x00400010	0x24020005	addiu \$2,\$0,0x00000005	16: li \$v0, 5 # \$v0 = 5 (syscall "read int")
0x00400014	0x0000000c	syscall	# read int() (o valor lido é
0x00400018	0x00024021	addu \$8,\$0,\$2	17: move \$t0, \$v0 # \$t0 = \$v0 (num = read int())
0x0040001c	0x3c011001	lui \$1,0x00001001	18: la \$a0, result # \$a0 = result
0x00400020	0x34240000	ori \$4,\$1,0x00000000	
0x00400024	0x24020004	addiu \$2,\$0,0x00000004	19: li \$v0, 4 # \$v0 = 4 (syscall "print str")
0x00400028	0x0000000c	syscall	# print str(result)
0x0040002c	0x20010006	addi \$1,\$0,0x00000006	20: sub \$a0, \$t0, 6 # \$a0 = \$t0 - 6 (\$a0 = num - 6)
0x00400030	0x01012022	sub \$4,\$8,\$1	
0x00400034	0x24020001	addiu \$2,\$0,0x00000001	21: li \$v0, 1 # \$v0 = 1 (syscall "print int")
0x00400038	0x0000000c	syscall	# print int(num - 6)
0x0040003c	0x2402000a	addiu \$2,\$0,0x0000000a	22: li \$v0, 10 #
0x00400040	0x0000000c	syscall	23: syscall # exit()

1001 0001

load up immediate

Prompt:

l
o

c
u
c
e
r
o

m
e
m
u

Processador Little-Endian

Address	Value (+0)	Value (+4)	Value (+8)	Value (+c)	Value (+10)	Value (+14)	Value (+18)	Value (+1c)
0x10010000	n o \n	r e m u	m e o	e u q	n e p	t a a e	t a e	i \n
0x10010020	e p \n	a s n	m u n	e m u n	\n f o r	A . S	i c i d	a n o
0x10010040	. 3 \n 3	l u m	l p i t	e m u n	e r o	t l u s	o d a	r o p
0x10010060	. 4 \n 2	b u s	i a r t	n o	r e m u	m e o	e u q	n e p
0x10010080	t s a e	\t \n \n e	l a u o	r o	l u s e	o d a t	\n \n	\n \n \n \n
0x100100a0	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n
0x100100c0	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n
0x100100e0	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n
0x10010100	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n
0x10010120	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n
0x10010140	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n
0x10010160	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n
0x10010180	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n	\n \n \n \n

Address	Value (+0)	Value (+4)	Value (+8)	Value (+c)	Value (+10)	Value (+14)	Value (+18)	Value (+1c)
0x10010000	0x6e204f0a	0x72656d75	0x6de65206f	0x65757120	0x6e657020	0x74736173	0x27652065	0x3100203a
0x10010020	0x6550202e	0x2061736e	0x206d756e	0x656d756e	0x0a216f72	0x41202e32	0x69636964	0x20616e6f
0x10010040	0x2e330a33	0x6c754d20	0x6c706974	0x20616369	0x6572206f	0x746c7573	0x206f6461	0x20726f70
0x10010060	0x2e340a32	0x62755320	0x69617274	0x6e206f72	0x72656d75	0x6de65206f	0x65757120	0x6e657020
0x10010080	0x74736173	0x090a0a65	0x6c617551	0x72206f72	0x6c757365	0x6f646174	0x0000203f	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

2

2.1

a) 0x00400000

b) Instrução Assembly:

la \$a0, prompt

Máquina real:

lui \$1, 0x00001001

ori \$4, \$1, 0x0000001f

c) Código máquina:

0x3c011001

0x3424001f

d) O endereço da primeira instrução Assembly de "main": 0x00400000

2.2

De 0x10010000 a 0x10010088