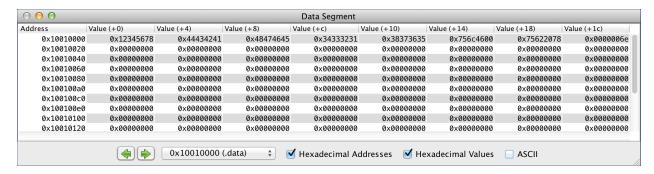
MARS



ADDRESS	VALUE (+0)	VALUE (+4)
0x1001 0000		
0x1001 0020		

ADDRESS	VALUE (+0)			VALUE (+4)				
	+3	+2	+1	+0	+7	+6	+5	+4
0x1001 0000								
0x1001 0020								

ADDRESS	CONTENT
0x1001 0007	
0x1001 0006	
0x1001 0005	
0x1001 0004	
0x1001 0003	
0x1001 0002	
0x1001 0001	
0x1001 0000	

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Data Directives

0×00000000

0×00000000

0x10010000 (.data)

0×10010040

Example

.data		
.space	5	# allocates bytes of memory
.ascii	"hop"	# allocates bytes of memory
.asciiz	"Flux"	# allocates bytes of memory
.byte	10 0x00 0x41 48 0x30 0xFF	# allocates bytes of memory
.half	0x1234 0x56 0xABCD	# allocates bytes of memory
.word	0xFACE 0xDEADBEEF	# allocates bytes of memory
.float	42 6.75	# allocates bytes of memory
$\bigcirc \bigcirc \bigcirc$	Dat	a Segment
Address 0x1001000 0x1001002		e(+c) Value (+10) Value (+14) Value (+18) Value (+1c) 41000a00 0x00ff3030 0x00561234 0x0000abcd 0x0000face 00000000 0x00000000 0x00000000 0x00000000

0×00000000

0×00000000

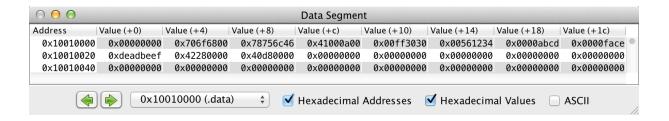
0×00000000

✓ Hexadecimal Addresses ✓ Hexadecimal Values
☐ ASCII

0×00000000

0×00000000

0×00000000



ADDRESS	CONTENT (HEX)	ADDRESS	CONTENT (HEX)	ADDRESS	CONTENT (HEX)
0x1001 000F		0x1001 001F		0x1001 002F	
0x1001 000E		0x1001 001E		0x1001 002E	
0x1001 000D		0x1001 001D		0x1001 002D	
0x1001 000C		0x1001 001C		0x1001 002C	
0x1001 000B		0x1001 001B		0x1001 002B	
0x1001 000A		0x1001 001A		0x1001 002A	
0x1001 0009		0x1001 0019		0x1001 0029	
0x1001 0008		0x1001 0018		0x1001 0028	
0x1001 0007		0x1001 0017		0x1001 0027	
0x1001 0006		0x1001 0016		0x1001 0026	
0x1001 0005		0x1001 0015		0x1001 0025	
0x1001 0004		0x1001 0014		0x1001 0024	
0x1001 0003		0x1001 0013		0x1001 0023	
0x1001 0002		0x1001 0012		0x1001 0022	
0x1001 0001		0x1001 0011		0x1001 0021	
0x1001 0000		0x1001 0010		0x1001 0020	

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Syscall System Services	
Syscall 1:	
Syscall 34:	_
Syscall 35:	_
Syscall 36:	_
Syscall 4:	
Syscall 11:	_

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Example

4294967295

```
Code
.text
li
    $t0 -1
move $a0 $t0
   $v0 1
syscall
li
    $a0 '\n'
li
    $v0 11
syscall
    $v0 34
move $a0 $t0
syscall
li
    $a0 '\n'
li
    $v0 11
syscall
move $a0 $t0
li $v0 35
syscall
li
    $a0 '\n'
    $v0 11
syscall
move $a0 $t0
li $v0 36
syscall
Output
-1
0xffffffff
```