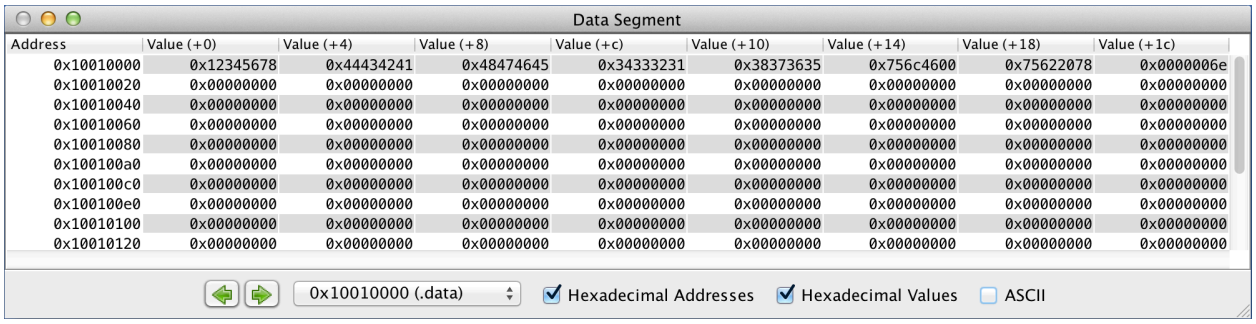
MARS



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

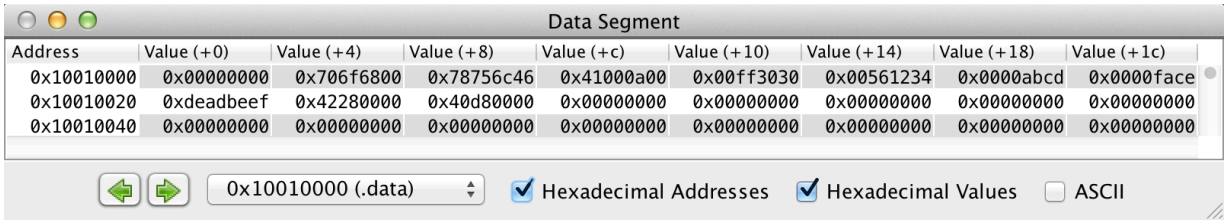
ADDRESS	VALUE (+0)				VALUE (+4)			
	+3	+2	+1	+0	+7	+6	+5	+4
0x1001 0000								
0x1001 0020								

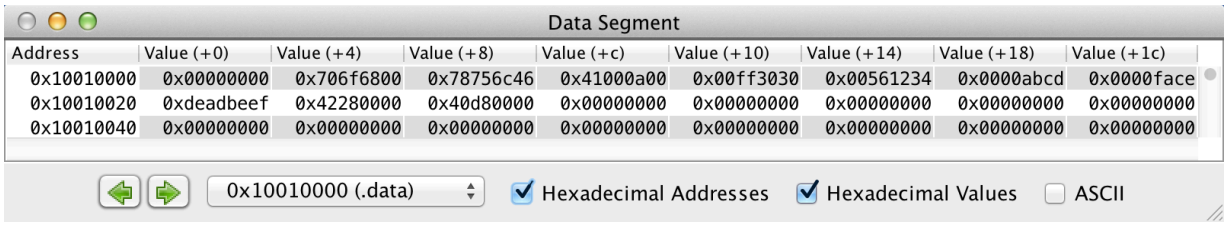
ADDRESS	CONTENT
0x1001 0007	
0x1001 0006	
0x1001 0005	
0x1001 0004	
0x1001 0003	
0x1001 0002	
0x1001 0001	
0x1001 0000	

Data Directives

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
```





ADDRESS	CONTENT (HEX)
0x1001 000F	
0x1001 000E	
0x1001 000D	
0x1001 000C	
0x1001 000B	
0x1001 000A	
0x1001 0009	
0x1001 0008	
0x1001 0007	
0x1001 0006	
0x1001 0005	
0x1001 0004	
0x1001 0003	
0x1001 0002	
0x1001 0001	
0x1001 0000	

ADDRESS	CONTENT (HEX)
0x1001 001F	
0x1001 001E	
0x1001 001D	
0x1001 001C	
0x1001 001B	
0x1001 001A	
0x1001 0019	
0x1001 0018	
0x1001 0017	
0x1001 0016	
0x1001 0015	
0x1001 0014	
0x1001 0013	
0x1001 0012	
0x1001 0011	
0x1001 0010	

ADDRESS	CONTENT (HEX)
0x1001 002F	
0x1001 002E	
0x1001 002D	
0x1001 002C	
0x1001 002B	
0x1001 002A	
0x1001 0029	
0x1001 0028	
0x1001 0027	
0x1001 0026	
0x1001 0025	
0x1001 0024	
0x1001 0023	
0x1001 0022	
0x1001 0021	
0x1001 0020	

Syscall System Services

Syscall 1: _____

Syscall 34: _____

Syscall 35: _____

Syscall 36: _____

Syscall 4: _____

Syscall 11: _____

Example

Code

```
.text

li   $t0 -1
move $a0 $t0
li   $v0 1
syscall

li   $a0 '\n'
li   $v0 11
syscall

li   $v0 34
move $a0 $t0
syscall

li   $a0 '\n'
li   $v0 11
syscall

move $a0 $t0
li   $v0 35
syscall

li   $a0 '\n'
li   $v0 11
syscall

move $a0 $t0
li   $v0 36
syscall
```

Output

```
-1
0xffffffff
11111111111111111111111111111111
4294967295
```