

Trabajo práctico 1 MIPS

Instalación y reemplazo de componentes internos

Facundo Román 6to INFO 2022

1.

```
.data
dato: .byte 3
.text
.globl main
main: lw $t0,dato($0)
```

2.

```
.data
A: .space 80
B: .space 80
```

```
.text
.global main
```

main:

3.

```
.data 0x10001000
var: .word 10
b-var: .byte 0x10
```

```
.align 4
6 a-var: .word 530
```

4.

```
.data
A: .word 3
B: .byte 0x10
.align 4
C: .space 4
D: .byte 20
```

5.

.data

text: .ascii "Esto es un problema"

wstring: .word 69, 115, 116, 111, 32, 101, 115, 32, 117, 110, 32, 112, 114, 111, →, 98, 108, 101, 109, 97

bstring: .byte 69, 115, 116, 111, 32, 101, 115, 32, 117, 110, 32, 112, 114, 111, →, 98, 108, 101, 109, 97

6.

.data

arrayr: .byte 1, 2, 3, 4, 5, 6, 7, 8, 9

arrayc: .byte 1, 4, 7, 2, 5, 8, 3, 6, 9

7.

.data

array: .word 10, 20, 25, 500, 3

.text

main:

la \$t1, array

lw \$s0, 0(\$t1)

lw \$s1, 4(\$t1)

lw \$s2, 8(\$t1)

lw \$s3 12(\$t1)

lw \$s4, 16(\$t1)

8.

.data 0x10000000

array: .word 10, 20, 25, 500, 3

.text

main:

la \$t0, array

li \$t1, 0x10010000

li \$t2, 0x10010014

loop: lw \$s0, 0(\$t0)

sw \$s0, 0(\$t1)

```
add $t0, $t0, 4
add $t1, $t1, 4
```

```
blt $t1, $t2, loop
nop
```

9.

10.

```
.data
word: .word 0x10203040
.text
```

```
la $t0, word
```

```
lh $s0, 0($t0)
lh $s1, 2($t0)
```

```
sh $s1, 0($t0)
sh $s0, 2($t0)
```

11.

12.

```
.data 0x10000000
vect: .byte 10, 20
.text
la $t0, vect
lb $s0, 0($t0)
lb $s1, 1($t0)
```

```
add $s2, $s0, $s1
```

```
sb $s2, 2($t0)
```

13.

```
.data 0x10000000
```

```
vect: .word 18, -1215
```

```
.text
```

```
la $t0, vect
```

```
li $t1, 0x10010000
```

```
lw $s0, 0($t0)
```

```
lw $s1, 4($t0)
```

```
div $s0, $s0, 5
```

```
div $s1, $s1, 5
```

```
div $s3, $s0, $1
```

```
sb $s3, 0($t1)
```

```
14.
```

```
.data 0x10000000
```

```
num: .word 0xabcd12bd
```

```
.text
```

```
lw $s0, num($0)
```

```
andi $s0, $s0, 0x2BB
```

```
15.
```

```
.data 0x10000000
```

```
num: .word 0xfffff41
```

```
.text
```

```
lw $s0, num($0)
```

```
xor $s0, $s0, 0x144
```

```
16.
```

```
.data
```

```
num: .word 0x1237
```

```
.text
```

```
lw $s0, num($0)
```

sll \$s0, \$s0, 5

El repositorio que usaremos a partir de ahora es [este](#).