

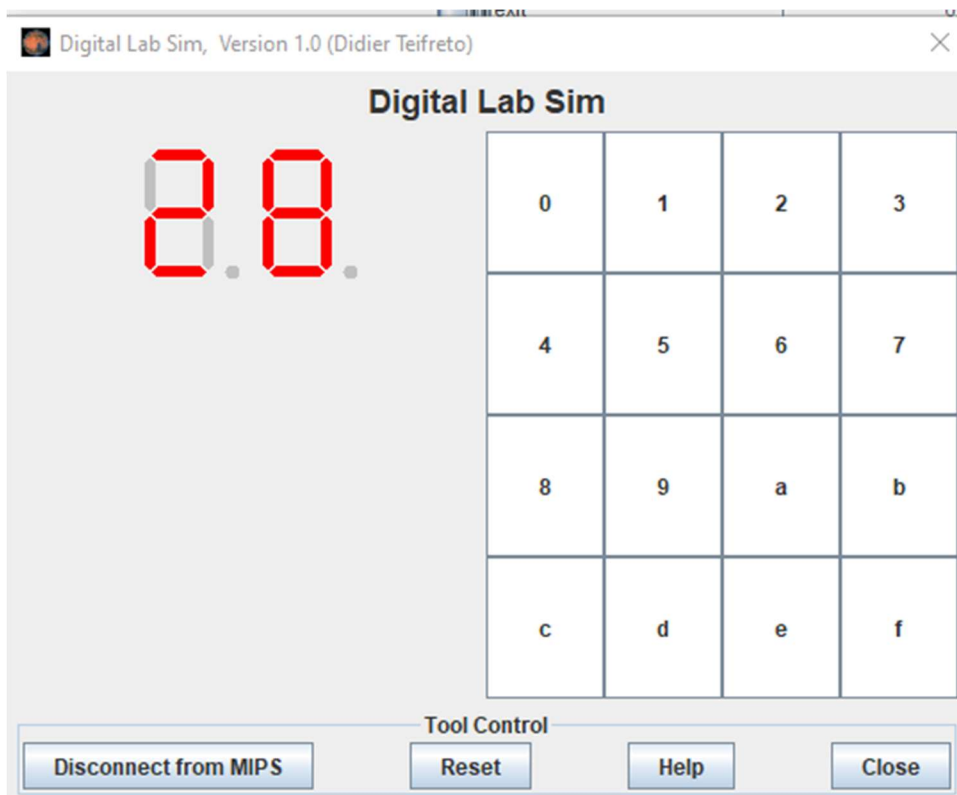
# Laboratory Exercise 10

Đỗ Hải Dương - 20194528

## Home Assignment 1 – LED PORT

```
1  .eqv SEVENSEG_LEFT 0xFFFF0011    # Địa chỉ của đèn led 7 đoạn trái.
2                                     # Bit 0 = đoạn a;
3                                     # Bit 1 = đoạn b; ...
4                                     # Bit 7 = dấu .
5  .eqv SEVENSEG_RIGHT 0xFFFF0010   # Địa chỉ của đèn led 7 đoạn phải
6  .text
7  main:
8      li $a0, 0x5B # set value for segments
9      jal SHOW_7SEG_LEFT # show
10     nop
11     li $a0, 0x7F # set value for segments
12     jal SHOW_7SEG_RIGHT # show
13     nop
14 exit:  li $v0, 10
15         syscall
16 endmain:
17 #-----
18 # Function SHOW_7SEG_LEFT : turn on/off the 7seg
19 # param[in] $a0 value to shown
20 # remark $t0 changed
21 #-----
22 SHOW_7SEG_LEFT:
23     li $t0, SEVENSEG_LEFT # assign port's address
24     sb $a0, 0($t0) # assign new value
25     nop
26     jr $ra
27     nop
28 #-----
29 # Function SHOW_7SEG_RIGHT : turn on/off the 7seg
30 # param[in] $a0 value to shown
31 # remark $t0 changed
32 #-----
33 SHOW_7SEG_RIGHT:
34     li $t0, SEVENSEG_RIGHT # assign port's address
35     sb $a0, 0($t0) # assign new value
36     nop
37     jr $ra
38     nop
```

Kết quả:



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```
li $a0, 0x5B # set value for segments
jal SHOW_7SEG_LEFT # show
```

In ra số 2:

```
nop
li $a0, 0x7F # set value for segments
jal SHOW_7SEG_RIGHT # show
```

In ra số 8:

```
nop
```

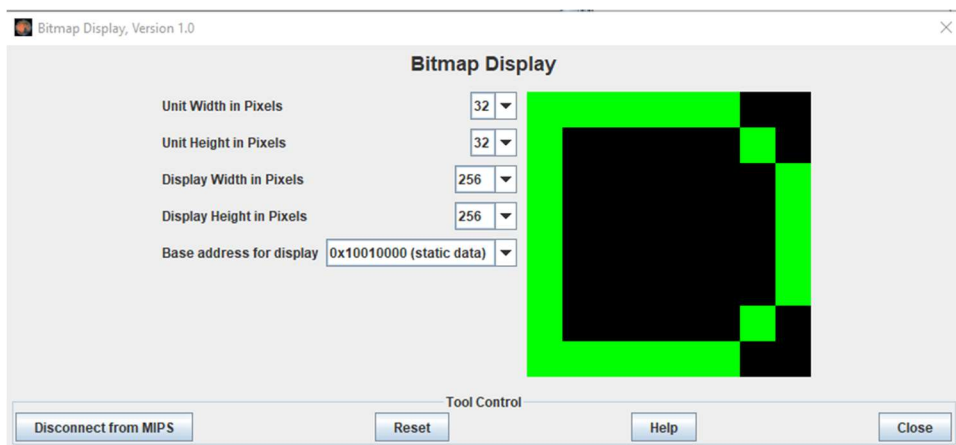
## Home Assignment 2 – BITMAP DISPLAY

```

1  .eqv MONITOR_SCREEN 0x10010000 #Dia chi bat dau cua bo nho man hinh
2  .eqv GREEN 0x0000FF00
3  .text
4      li $k0, MONITOR_SCREEN #Nap dia chi bat dau cua man hinh
5
6      li $t0, GREEN
7      sw $t0, 0($k0)
8      sw $t0, 4($k0)
9      sw $t0, 8($k0)
10     sw $t0, 12($k0)
11     sw $t0, 16($k0)
12     sw $t0, 20($k0)
13     sw $t0, 32($k0)
14     sw $t0, 56($k0)
15     sw $t0, 64($k0)
16     sw $t0, 92($k0)
17     sw $t0, 96($k0)
18     sw $t0, 124($k0)
19     sw $t0, 128($k0)
20     sw $t0, 156($k0)
21     sw $t0, 160($k0)
22     sw $t0, 188($k0)
23     sw $t0, 192($k0)
24     sw $t0, 216($k0)
25
26     sw $t0, 224($k0)
27     sw $t0, 228($k0)
28     sw $t0, 232($k0)
29     sw $t0, 236($k0)
30     sw $t0, 240($k0)
31     sw $t0, 244($k0)
32     nop

```

Kết quả:



Output: chữ D (Đỗ Hải Dương)