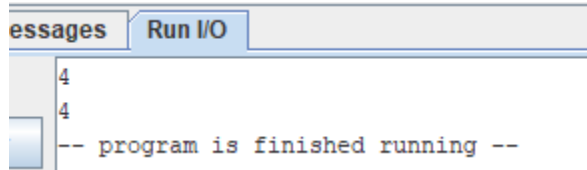


LAB TASK

1. Where (to which window) is the output data displayed?

OUTPUT:

2. Write down the address of the first instruction of the program (see the text window)

OUTPUT:

Address	Code	Basic	
0x00400000	0x24020005	addiu \$2,\$0,0x00000005	6: li \$v0,5
0x00400004	0x00000000	syscall	7: syscall

3. Write down the value of the register \$sp just before you start the program.

OUTPUT:

\$sp	29	0x7ffffeffc
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4. Write down the values of \$a0 and \$v0 after execution in Register window and why?

OUTPUT:

\$v0	2	0x0000000a
\$v1	3	0x00000000
\$a0	4	0x00000041

5. Write an assembly program that Read and Print character.

SOLUTION:

```
.text
.global main
main:
li $v0,12
syscall
move $a0,$v0
li $v0,11
syscall
li $v0,10
syscall
```

OUTPUT:

Run speed at max (no interaction)

Edit Execute

Text Segment

Bkpt	Address	Code	Basic	Source
<input type="checkbox"/>	0x00400000	0x2402000c	addiu \$2,\$0,0x0000000c	6: li \$v0,12
<input type="checkbox"/>	0x00400004	0x0000000c	syscall	7: syscall
<input type="checkbox"/>	0x00400008	0x00022021	addiu \$4,\$0,\$2	8: move \$a0,\$v0
<input type="checkbox"/>	0x0040000c	0x2402000b	addiu \$2,\$0,0x0000000b	9: li \$v0,11
<input type="checkbox"/>	0x00400010	0x0000000c	syscall	10: syscall
<input type="checkbox"/>	0x00400014	0x2402000a	addiu \$2,\$0,0x0000000a	11: li \$v0,10
<input type="checkbox"/>	0x00400018	0x0000000c	syscall	12: syscall

Data Segment

Address	Value (+0)	Value (+4)	Value (+8)	Value (+c)	Value (+10)	Value (+14)	Value (+18)	Value (+1c)
0x10010000	0xcccccccd	0x4016cccc	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x10010020	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x10010040	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x10010060	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000
0x10010080	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	0x00000000	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

0x10010000 (.data) ☒ Hexadecimal Addresses ☒ Hexadecimal Values ☐ ASCII

Mars Messages Run I/O

Clear tt
-- program is finished running --