

Ex1:

C:\Users\bassa\OneDrive\المستندات\MyMips\Adding two integers.asm - MARS 4.5

File Edit Run Settings Tools Help

Run speed at max (no interaction)

Edit Execute

Multiplication using sll.asm Division.asm Division2.asm DivisionQuotient and Remainder.asm helloworld.asm

Adding two integers.asm Subtracting numbers.asm Multiplication using mul.asm Multiplication using mult.asm

```
5
6 .text
7
8 .globl main
9
10 main:
11
12     lw $t0, no1
13     lw $t1, no2
14     add $t2, $t0, $t1    # t2=t0+t1
15
16     li $v0, 1            # Printing the result stored in t2
17     add $a0, $zero, $t2
18     syscall
19
20     li $v0, 10           # To terminate the program
21     syscall
22
23 .end main
24
```

Line: 23 Column: 10 Show Line Numbers

Mars Messages Run I/O

Go: execution completed successfully.

Clear

Registers		
	Coproc 1	Coproc 0
Name	Number	Value
\$zero	0	0
\$at	1	0
\$v0	2	0
\$v1	3	0
\$a0	4	0
\$a1	5	0
\$a2	6	0
\$a3	7	0
\$t0	8	0
\$t1	9	0
\$t2	10	0
\$t3	11	0
\$t4	12	0
\$t5	13	0
\$t6	14	0
\$t7	15	0
\$s0	16	0
\$s1	17	0
\$s2	18	0
\$s3	19	0
\$s4	20	0
\$s5	21	0
\$s6	22	0
\$s7	23	0
\$s8	24	0
\$s9	25	0
\$k0	26	0
\$k1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0

26°C أحطار غزيرة قريباً

7:42 PM 1/1/2023

C:\Users\bassa\OneDrive\المستندات\MyMips\Adding two integers.asm - MARS 4.5

File Edit Run Settings Tools Help

Run speed at max (no interaction)

Mars Messages Run I/O

-- program is finished running --

Clear

Registers		
	Coproc 1	Coproc 0
Name	Number	Value
\$at	1	268500992
\$v0	2	10
\$v1	3	0
\$a0	4	25
\$a1	5	0
\$a2	6	0
\$a3	7	0
\$t0	8	10
\$t1	9	15
\$t2	10	25
\$t3	11	0
\$t4	12	0
\$t5	13	0
\$t6	14	0
\$t7	15	0
\$s0	16	0
\$s1	17	0
\$s2	18	0
\$s3	19	0
\$s4	20	0
\$s5	21	0
\$s6	22	0
\$s7	23	0
\$s8	24	0
\$s9	25	0
\$k0	26	0
\$k1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0
pc		4194344

26°C أحطار غزيرة قريباً

7:44 PM 1/1/2023

Ex2:

C:\Users\bassa\OneDrive\المستندات\MyMips\Subtracting numbers.asm - MARS 4.5

File Edit Run Settings Tools Help

Run speed at max (no interaction)

Edit Execute

Multiplication using sll.asm Division.asm Division2.asm DivisionQuotient and Remainder.asm helloworld.asm

Adding two integers.asm Subtracting numbers.asm Multiplication using mul.asm Multiplication using mult.asm

```
1 no2: .word 0
2
3 .text
4
5 .globl main
6
7 main:
8
9     lw $s0, no2
10    lw $s1, no2
11    sub $t0, $s0, $s1
12    li $v0, 1
13    move $a0, $t0
14    syscall
15
16    li $v0, 10
17    syscall
18
19 .end main
20
21
22
```

Line: 22 Column: 10 Show Line Numbers

Registers Coproc 1 Coproc 0

Name	Number	Value
\$at	1	0
\$v0	2	0
\$v1	3	0
\$a0	4	0
\$a1	5	0
\$a2	6	0
\$a3	7	0
\$t0	8	0
\$t1	9	0
\$t2	10	0
\$t3	11	0
\$t4	12	0
\$t5	13	0
\$t6	14	0
\$t7	15	0
\$s0	16	0
\$s1	17	0
\$s2	18	0
\$s3	19	0
\$s4	20	0
\$s5	21	0
\$s6	22	0
\$s7	23	0
\$s8	24	0
\$s9	25	0
\$k0	26	0
\$k1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0
pc		4194304

26°C أحطار غزيرة قريباً

7:46 PM 1/1/2023

C:\Users\bassa\OneDrive\المستندات\MyMips\Subtracting numbers.asm - MARS 4.5

File Edit Run Settings Tools Help

Run speed at max (no interaction)

Mars Messages Run I/O

-- program is finished running --

Clear

Registers Coproc 1 Coproc 0

Name	Number	Value
\$at	1	268500592
\$v0	2	10
\$v1	3	0
\$a0	4	2
\$a1	5	0
\$a2	6	0
\$a3	7	0
\$t0	8	2
\$t1	9	0
\$t2	10	0
\$t3	11	0
\$t4	12	0
\$t5	13	0
\$t6	14	0
\$t7	15	0
\$s0	16	10
\$s1	17	0
\$s2	18	0
\$s3	19	0
\$s4	20	0
\$s5	21	0
\$s6	22	0
\$s7	23	0
\$s8	24	0
\$s9	25	0
\$k0	26	0
\$k1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0
pc		4194344

26°C أحطار غزيرة قريباً

7:47 PM 1/1/2023

Ex3A:

C:\Users\bassa\OneDrive\المستندات\MyMips\Multiplication using mul.asm* - MARS 4.5

File Edit Run Settings Tools Help

Run speed at max (no interaction)

Edit Execute

Multiplication using sll.asm Division.asm Division2.asm DivisionQuotient and Remainder.asm helloworld.asm

Adding two integers.asm Subtracting numbers.asm Multiplication using mul.asm Multiplication using mult.asm

```
1
2      m01: .word 10
3      m02: .word 8
4
5      .text
6
7      .globl main
8
9      main:
10         addi $t0,$zero,3000
11         addi $t1,$zero,20
12         mul  $s0,$t0,$t1
13
14         li  $v0,1
15         add $a0,$zero,$s0
16         syscall
17
18
19         li $v0, 10
20         syscall
21
22     .end main
23
```

Line: 23 Column: 10 Show Line Numbers

Name	Number	Value
\$at	1	0
\$v0	2	0
\$v1	3	0
\$a0	4	0
\$a1	5	0
\$a2	6	0
\$a3	7	0
\$t0	8	0
\$t1	9	0
\$t2	10	0
\$t3	11	0
\$t4	12	0
\$t5	13	0
\$t6	14	0
\$t7	15	0
\$s0	16	0
\$s1	17	0
\$s2	18	0
\$s3	19	0
\$s4	20	0
\$s5	21	0
\$s6	22	0
\$s7	23	0
\$s8	24	0
\$s9	25	0
\$k0	26	0
\$k1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0
pc		4194304

26°C أحطار غريبة قريباً

7:48 PM 1/1/2023

C:\Users\bassa\OneDrive\المستندات\MyMips\Multiplication using mul.asm* - MARS 4.5

File Edit Run Settings Tools Help

Run speed at max (no interaction)

Mars Messages Run I/O

00000
-- program is finished running --

Clear

Name	Number	Value
\$at	1	0
\$v0	2	10
\$v1	3	0
\$a0	4	60000
\$a1	5	0
\$a2	6	0
\$a3	7	0
\$t0	8	3000
\$t1	9	20
\$t2	10	0
\$t3	11	0
\$t4	12	0
\$t5	13	0
\$t6	14	0
\$t7	15	0
\$s0	16	60000
\$s1	17	0
\$s2	18	0
\$s3	19	0
\$s4	20	0
\$s5	21	0
\$s6	22	0
\$s7	23	0
\$s8	24	0
\$s9	25	0
\$k0	26	0
\$k1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0
pc		4194336

26°C أحطار غريبة قريباً

7:48 PM 1/1/2023

Ex3B:

C:\Users\bassa\OneDrive\المستندات\MyMips\Multiplication using mult.asm* - MARS 4.5

File Edit Run Settings Tools Help

Run speed at max (no interaction)

Edit Execute

Multiplication using sll.asm Division.asm Division2.asm DivisionQuotient and Remainder.asm helloworld.asm

Adding two integers.asm Subtracting numbers.asm Multiplication using mul.asm Multiplication using mult.asm*

```
1
2 .text
3
4 .globl main
5
6 main:
7     addi $t0,$zero,3000
8     addi $t1,$zero,20
9     mult $t0,$t1
10    mflo $s0
11
12    li $v0,1
13    add $a0,$zero,$s0
14    syscall
15
16
17    li $v0,10
18    syscall
19
20 .end main
```

Line: 24 Column: 10 Show Line Numbers

Name	Number	Value
\$at	1	0
\$v0	2	0
\$v1	3	0
\$a0	4	0
\$a1	5	0
\$a2	6	0
\$a3	7	0
\$t0	8	0
\$t1	9	0
\$t2	10	0
\$t3	11	0
\$t4	12	0
\$t5	13	0
\$t6	14	0
\$t7	15	0
\$s0	16	0
\$s1	17	0
\$s2	18	0
\$s3	19	0
\$s4	20	0
\$s5	21	0
\$s6	22	0
\$s7	23	0
\$t8	24	0
\$t9	25	0
\$n0	26	0
\$n1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0
pc		4194304

26°C أحطار غزيرة قريباً

7:49 PM 1/1/2023

C:\Users\bassa\OneDrive\المستندات\MyMips\Multiplication using mult.asm* - MARS 4.5

File Edit Run Settings Tools Help

Run speed at max (no interaction)

Mars Messages Run I/O

00000
-- program is finished running --

Clear

Name	Number	Value
\$at	1	0
\$v0	2	10
\$v1	3	0
\$a0	4	60000
\$a1	5	0
\$a2	6	0
\$a3	7	0
\$t0	8	3000
\$t1	9	20
\$t2	10	0
\$t3	11	0
\$t4	12	0
\$t5	13	0
\$t6	14	0
\$t7	15	0
\$s0	16	60000
\$s1	17	0
\$s2	18	0
\$s3	19	0
\$s4	20	0
\$s5	21	0
\$s6	22	0
\$s7	23	0
\$t8	24	0
\$t9	25	0
\$n0	26	0
\$n1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0
pc		4194340

26°C أحطار غزيرة قريباً

7:50 PM 1/1/2023

Ex3C:

C:\Users\bassa\OneDrive\المستندات\MyMips\Multiplication using s1.asm - MARS 4.5

File Edit Run Settings Tools Help

Run speed at max (no interaction)

Edit Execute

Multiplication using s1.asm' Division.asm Division2.asm DivisionQuotient and Remainder.asm helloworld.asm

Adding two integers.asm Subtracting numbers.asm Multiplication using mul.asm Multiplication using mult.asm

```
1  m01: .word 10
2  m02: .word 8
3
4  .text
5
6  .globl main
7
8  main:
9
10     addi $s0,$zero,4
11     sll $t0,$s0,2
12
13     li $v0,1
14     add $a0,$zero,$t0
15     syscall
16
17     li $v0,10
18     syscall
19
20 .end main
21
22
```

Line: 22 Column: 10 Show Line Numbers

Name	Number	Value
\$at	1	0
\$v0	2	0
\$v1	3	0
\$a0	4	0
\$a1	5	0
\$a2	6	0
\$a3	7	0
\$t0	8	0
\$t1	9	0
\$t2	10	0
\$t3	11	0
\$t4	12	0
\$t5	13	0
\$t6	14	0
\$t7	15	0
\$s0	16	0
\$s1	17	0
\$s2	18	0
\$s3	19	0
\$s4	20	0
\$s5	21	0
\$s6	22	0
\$s7	23	0
\$s8	24	0
\$s9	25	0
\$k0	26	0
\$k1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0
pc		4194304

26°C أحطار غريبة قريباً

7:51 PM 1/1/2023

C:\Users\bassa\OneDrive\المستندات\MyMips\Multiplication using s1.asm - MARS 4.5

File Edit Run Settings Tools Help

Run speed at max (no interaction)

Mars Messages Run I/O

```
16
-- program is finished running --
```

Clear

Name	Number	Value
\$at	1	0
\$v0	2	10
\$v1	3	0
\$a0	4	16
\$a1	5	0
\$a2	6	0
\$a3	7	0
\$t0	8	16
\$t1	9	0
\$t2	10	0
\$t3	11	0
\$t4	12	0
\$t5	13	0
\$t6	14	0
\$t7	15	0
\$s0	16	4
\$s1	17	0
\$s2	18	0
\$s3	19	0
\$s4	20	0
\$s5	21	0
\$s6	22	0
\$s7	23	0
\$s8	24	0
\$s9	25	0
\$k0	26	0
\$k1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0
pc		4194332

26°C أحطار غريبة قريباً

7:51 PM 1/1/2023

Ex4A:

C:\Users\bassa\OneDrive\المستندات\MyMips\Division.asm - MARS 4.5

File Edit Run Settings Tools Help

Run speed at max (no interaction)

Edit Execute

Multiplication using sll.asm Division.asm* Division2.asm DivisionQuotient and Remainder.asm helloworld.asm

Adding two integers.asm Subtracting numbers.asm Multiplication using mul.asm Multiplication using mult.asm

```
1
2 .text
3
4 .globl main
5
6 main:
7
8
9     addi $t0, $zero, 40
10    addi $t1, $zero, 4
11    div $s0, $t0, $t1
12
13    li $v0, 1
14    add $a0, $zero, $s0
15    syscall
16
17    li $v0, 10
18    syscall
19
20 .end main
21
22
23
24
25
```

Line: 24 Column: 10 Show Line Numbers

Name	Number	Value
\$at	1	0
\$v0	2	0
\$v1	3	0
\$a0	4	0
\$a1	5	0
\$a2	6	0
\$a3	7	0
\$t0	8	0
\$t1	9	0
\$t2	10	0
\$t3	11	0
\$t4	12	0
\$t5	13	0
\$t6	14	0
\$t7	15	0
\$s0	16	0
\$s1	17	0
\$s2	18	0
\$s3	19	0
\$s4	20	0
\$s5	21	0
\$s6	22	0
\$s7	23	0
\$s8	24	0
\$s9	25	0
\$k0	26	0
\$k1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0
pc		4194304

26°C أحطار غزيرة قريباً

7:52 PM 1/1/2023

C:\Users\bassa\OneDrive\المستندات\MyMips\Division.asm - MARS 4.5

File Edit Run Settings Tools Help

Run speed at max (no interaction)

Mars Messages Run I/O

10
-- program is finished running --

Clear

Name	Number	Value
\$at	1	0
\$v0	2	10
\$v1	3	0
\$a0	4	10
\$a1	5	0
\$a2	6	0
\$a3	7	0
\$t0	8	40
\$t1	9	4
\$t2	10	0
\$t3	11	0
\$t4	12	0
\$t5	13	0
\$t6	14	0
\$t7	15	0
\$s0	16	10
\$s1	17	0
\$s2	18	0
\$s3	19	0
\$s4	20	0
\$s5	21	0
\$s6	22	0
\$s7	23	0
\$s8	24	0
\$s9	25	0
\$k0	26	0
\$k1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0
pc		4194348

26°C أحطار غزيرة قريباً

7:53 PM 1/1/2023

Ex4B:

C:\Users\bassa\OneDrive\المستندات\MyMips\Division2.asm* - MARS 4.5

File Edit Run Settings Tools Help

Run speed at max (no interaction)

Edit Execute

Multiplication using sll.asm Division.asm Division2.asm* DivisionQuotient and Remainder.asm helloworld.asm

Adding two integers.asm Subtracting numbers.asm Multiplication using mul.asm Multiplication using mult.asm

```
1 .text
2
3 .globl main
4
5 #main:
6
7     addi $t0, $zero, 40
8     div $s0, $t0, 10
9
10    li $v0, 1
11    add $a0, $zero, $s0
12    syscall
13
14    li $v0, 10
15    syscall
16
17 .end main
18
```

Line: 6 Column: 1 Show Line Numbers

Name	Number	Value
\$at	1	0
\$v0	2	0
\$v1	3	0
\$a0	4	0
\$a1	5	0
\$a2	6	0
\$a3	7	0
\$t0	8	0
\$t1	9	0
\$t2	10	0
\$t3	11	0
\$t4	12	0
\$t5	13	0
\$t6	14	0
\$t7	15	0
\$s0	16	0
\$s1	17	0
\$s2	18	0
\$s3	19	0
\$s4	20	0
\$s5	21	0
\$s6	22	0
\$s7	23	0
\$s8	24	0
\$s9	25	0
\$k0	26	0
\$k1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0
pc		4194304

26°C أحظار غزيرة قريبًا

7:54 PM 1/1/2023

C:\Users\bassa\OneDrive\المستندات\MyMips\Division2.asm* - MARS 4.5

File Edit Run Settings Tools Help

Run speed at max (no interaction)

Mars Messages Run I/O

```
4
-- program is finished running --
```

Clear

Name	Number	Value
\$at	1	10
\$v0	2	10
\$v1	3	0
\$a0	4	4
\$a1	5	0
\$a2	6	0
\$a3	7	0
\$t0	8	40
\$t1	9	0
\$t2	10	0
\$t3	11	0
\$t4	12	0
\$t5	13	0
\$t6	14	0
\$t7	15	0
\$s0	16	4
\$s1	17	0
\$s2	18	0
\$s3	19	0
\$s4	20	0
\$s5	21	0
\$s6	22	0
\$s7	23	0
\$s8	24	0
\$s9	25	0
\$k0	26	0
\$k1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0
pc		4194340

26°C أحظار غزيرة قريبًا

7:54 PM 1/1/2023

Ex4C:

C:\Users\bassa\OneDrive\المستندات\MyMips\DivisionQuotient and Remainder.asm* - MARS 4.5

File Edit Run Settings Tools Help

Run speed at max (no interaction)

Edit Execute

Multiplication using sll.asm Division.asm Division2.asm DivisionQuotient and Remainder.asm* helloworld.asm

Adding two integers.asm Subtracting numbers.asm Multiplication using mul.asm Multiplication using mult.asm

```
1 .text
2
3 .globl main
4
5 main:
6
7     addi $t0, $zero, 40
8     addi $t1, $zero, 3
9     div $t0, $t1
10    mflo $a0
11    mfhi $a1
12
13    li $v0, 1
14    add $a0, $zero, $a0
15    syscall
16
17    li $v0, 1
18    add $a0, $zero, $a1
19    syscall
20
21    li $v0, 10
22    syscall
23
24 .end main
25
```

Line: 22 Column: 12 Show Line Numbers

Name	Number	Value
\$at	1	0
\$v0	2	0
\$v1	3	0
\$a0	4	0
\$a1	5	0
\$a2	6	0
\$a3	7	0
\$t0	8	0
\$t1	9	0
\$t2	10	0
\$t3	11	0
\$t4	12	0
\$t5	13	0
\$t6	14	0
\$t7	15	0
\$a0	16	0
\$a1	17	0
\$a2	18	0
\$a3	19	0
\$a4	20	0
\$a5	21	0
\$a6	22	0
\$a7	23	0
\$t8	24	0
\$t9	25	0
\$n0	26	0
\$r1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0
pc		4194304

26°C أحظار غيرة قريباً

Search

ENG US

7:55 PM 1/1/2023

C:\Users\bassa\OneDrive\المستندات\MyMips\DivisionQuotient and Remainder.asm* - MARS 4.5

File Edit Run Settings Tools Help

Run speed at max (no interaction)

Mars Messages Run I/O

```
131
-- program is finished running --
```

Clear

Name	Number	Value
\$at	1	0
\$v0	2	10
\$v1	3	0
\$a0	4	1
\$a1	5	0
\$a2	6	0
\$a3	7	0
\$t0	8	40
\$t1	9	3
\$t2	10	0
\$t3	11	0
\$t4	12	0
\$t5	13	0
\$t6	14	0
\$t7	15	0
\$a0	16	13
\$a1	17	1
\$a2	18	0
\$a3	19	0
\$a4	20	0
\$a5	21	0
\$a6	22	0
\$a7	23	0
\$t8	24	0
\$t9	25	0
\$n0	26	0
\$r1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0
pc		4194356

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