

Exercício Prático 6

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Parte 1

1 - A

2 - B

3 - A

4 - C

5 - D

6 - A

7 - D

8 - D

9 - B

10 - A

11 - B

12 - D

13 - B

14 - C

15 - B

16 - D

17 - A

18 - D

Parte 2 – Programa 1

[illegible]

Parte 2 – Programa 1

[illegible]

Parte 2 – Programa 2

File Edit Run Settings Tools Help

Run speed at max (no interaction) 40

Registers Coproc 1 Coproc 0

Name	Number	Value
\$ra	0	0
\$t0	1	0
\$t1	2	0
\$t2	3	0
\$t3	4	0
\$t4	5	0
\$t5	6	0
\$t6	7	0
\$t7	8	0
\$t8	9	0
\$t9	10	0
\$s0	11	0
\$s1	12	0
\$s2	13	0
\$s3	14	0
\$s4	15	0
\$s5	16	0
\$s6	17	0
\$s7	18	0
\$s8	19	0
\$s9	20	0
\$a0	21	0
\$a1	22	0
\$a2	23	0
\$a3	24	0
\$a4	25	0
\$a5	26	0
\$a6	27	0
\$a7	28	268688224
\$a8	29	2147473616
\$a9	30	0
\$f0	31	0
\$f1		4194300
\$f2		0
\$f3		0

```
program2.asm
addi $s0, $zero, 1 # x = 1

# y = 5*x
add $t0, $s0, $s0
add $t0, $t0, $t0
add $s1, $t0, $s0

# y = y + 15
addi $s1, $s1, 15
```

Line: 1 Column: 1 Show Line Numbers

Mars Messages Run IO

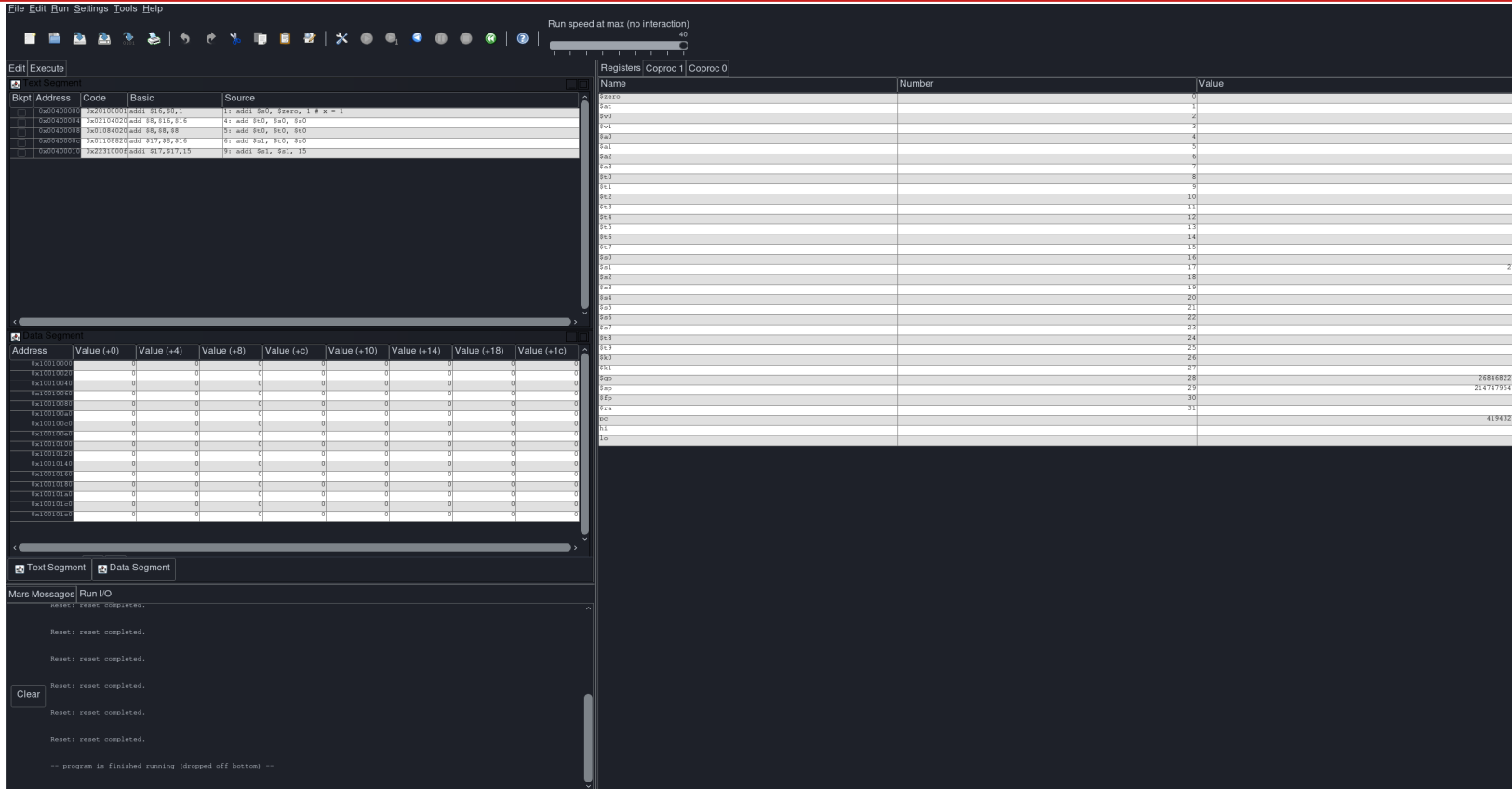
-- program is finished running (dropped off bottom) --

Reset: reset completed.

Reset: reset completed.

Clear -- program is finished running (dropped off bottom) --

Parte 2 – Programa 2



Parte 2 – Programa 3

The screenshot displays the Mars IDE interface with the following components:

- Assembly Code (Left Panel):**

```
problem3.asm
addi $s0, $zero, 3 # x = 3
addi $s1, $zero, 4 # y = 4

# 15 * x
add $t0, $s0, $s0
add $t0, $t0, $t0
add $t0, $t0, $t0
add $t0, $t0, $t0
sub $t0, $t0, $s0

# 64 * y
add $t1, $s1, $s1
add $t1, $t1, $t1
add $t1, $t1, $t1
add $t1, $t1, $t1
add $t1, $t1, $t1
add $t1, $t1, $t1

add $t1, $t1, $s1 # 65 * y
add $t1, $t1, $s1 # 66 * y
add $t1, $t1, $s1 # 67 * y

# (15 * x) + (67 * y)
add $t2, $t0, $t1

# (15 * x) + (67 * y) * 4
add $s2, $t2, $t2
add $s2, $s2, $s2
```
- Registers Window (Right Panel):**

Name	Number	Value
\$s0	3	0
\$s1	4	0
\$s2	2	0
\$t0	3	0
\$t1	4	0
\$t2	5	0
\$t3	6	0
\$t4	7	0
\$t5	8	0
\$t6	9	0
\$t7	10	0
\$t8	11	0
\$t9	12	0
\$t10	13	0
\$t11	14	0
\$t12	15	0
\$t13	16	0
\$t14	17	0
\$t15	18	0
\$t16	19	0
\$t17	20	0
\$t18	21	0
\$t19	22	0
\$t20	23	0
\$t21	24	0
\$t22	25	0
\$t23	26	0
\$t24	27	0
\$t25	28	26868224
\$t26	29	214747514
\$t27	30	0
\$t28	31	0
\$t29		419480
\$t30		0
- Message Window (Bottom Panel):**

Line: 1 Column: 1 Show Line Numbers

Mars Messages Run IO

Reset: reset completed.

Reset: reset completed.

Reset: reset completed.

Reset: reset completed.

Reset: reset completed.

Reset: reset completed.

-- program is finished running (dropped off bottom) --

Parte 2 – Programa 3

File Edit Run Settings Tools Help

Run speed at max (no interaction) 40

Registers Coproc 1 Coproc 0

Name	Number	Value
PC	0	0
PC+1	1	0
PC+2	2	0
PC+3	3	0
PC+4	4	0
PC+5	5	0
PC+6	6	0
PC+7	7	0
PC+8	8	435
PC+9	9	288
PC+10	10	333
PC+11	11	0
PC+12	12	0
PC+13	13	0
PC+14	14	0
PC+15	15	0
PC+16	16	0
PC+17	17	4
PC+18	18	1280
PC+19	19	0
PC+20	20	0
PC+21	21	0
PC+22	22	0
PC+23	23	0
PC+24	24	0
PC+25	25	0
PC+26	26	0
PC+27	27	0
PC+28	28	288488224
PC+29	29	2147479544
PC+30	30	0
PC+31	31	0
PC+32	32	4194880
PC+33	33	0
PC+34	34	0

Data Segment

Address	Value (+0)	Value (+4)	Value (+8)	Value (+c)	Value (+10)	Value (+14)	Value (+18)	Value (+1c)
0x1010000	0	0	0	0	0	0	0	0
0x1010004	0	0	0	0	0	0	0	0
0x1010008	0	0	0	0	0	0	0	0
0x101000c	0	0	0	0	0	0	0	0
0x1010010	0	0	0	0	0	0	0	0
0x1010014	0	0	0	0	0	0	0	0
0x1010018	0	0	0	0	0	0	0	0
0x101001c	0	0	0	0	0	0	0	0
0x1010020	0	0	0	0	0	0	0	0
0x1010024	0	0	0	0	0	0	0	0
0x1010028	0	0	0	0	0	0	0	0
0x101002c	0	0	0	0	0	0	0	0
0x1010030	0	0	0	0	0	0	0	0
0x1010034	0	0	0	0	0	0	0	0
0x1010038	0	0	0	0	0	0	0	0
0x101003c	0	0	0	0	0	0	0	0
0x1010040	0	0	0	0	0	0	0	0
0x1010044	0	0	0	0	0	0	0	0
0x1010048	0	0	0	0	0	0	0	0
0x101004c	0	0	0	0	0	0	0	0
0x1010050	0	0	0	0	0	0	0	0
0x1010054	0	0	0	0	0	0	0	0
0x1010058	0	0	0	0	0	0	0	0
0x101005c	0	0	0	0	0	0	0	0
0x1010060	0	0	0	0	0	0	0	0
0x1010064	0	0	0	0	0	0	0	0
0x1010068	0	0	0	0	0	0	0	0
0x101006c	0	0	0	0	0	0	0	0
0x1010070	0	0	0	0	0	0	0	0
0x1010074	0	0	0	0	0	0	0	0
0x1010078	0	0	0	0	0	0	0	0
0x101007c	0	0	0	0	0	0	0	0
0x1010080	0	0	0	0	0	0	0	0
0x1010084	0	0	0	0	0	0	0	0
0x1010088	0	0	0	0	0	0	0	0
0x101008c	0	0	0	0	0	0	0	0
0x1010090	0	0	0	0	0	0	0	0
0x1010094	0	0	0	0	0	0	0	0
0x1010098	0	0	0	0	0	0	0	0
0x101009c	0	0	0	0	0	0	0	0
0x10100a0	0	0	0	0	0	0	0	0
0x10100a4	0	0	0	0	0	0	0	0
0x10100a8	0	0	0	0	0	0	0	0
0x10100ac	0	0	0	0	0	0	0	0
0x10100b0	0	0	0	0	0	0	0	0
0x10100b4	0	0	0	0	0	0	0	0
0x10100b8	0	0	0	0	0	0	0	0
0x10100bc	0	0	0	0	0	0	0	0
0x10100c0	0	0	0	0	0	0	0	0
0x10100c4	0	0	0	0	0	0	0	0
0x10100c8	0	0	0	0	0	0	0	0
0x10100cc	0	0	0	0	0	0	0	0
0x10100d0	0	0	0	0	0	0	0	0
0x10100d4	0	0	0	0	0	0	0	0
0x10100d8	0	0	0	0	0	0	0	0
0x10100dc	0	0	0	0	0	0	0	0
0x10100e0	0	0	0	0	0	0	0	0
0x10100e4	0	0	0	0	0	0	0	0
0x10100e8	0	0	0	0	0	0	0	0
0x10100ec	0	0	0	0	0	0	0	0
0x10100f0	0	0	0	0	0	0	0	0
0x10100f4	0	0	0	0	0	0	0	0
0x10100f8	0	0	0	0	0	0	0	0
0x10100fc	0	0	0	0	0	0	0	0
0x1010100	0	0	0	0	0	0	0	0
0x1010104	0	0	0	0	0	0	0	0
0x1010108	0	0	0	0	0	0	0	0
0x101010c	0	0	0	0	0	0	0	0
0x1010110	0	0	0	0	0	0	0	0
0x1010114	0	0	0	0	0	0	0	0
0x1010118	0	0	0	0	0	0	0	0
0x101011c	0	0	0	0	0	0	0	0
0x1010120	0	0	0	0	0	0	0	0
0x1010124	0	0	0	0	0	0	0	0
0x1010128	0	0	0	0	0	0	0	0
0x101012c	0	0	0	0	0	0	0	0
0x1010130	0	0	0	0	0	0	0	0
0x1010134	0	0	0	0	0	0	0	0
0x1010138	0	0	0	0	0	0	0	0
0x101013c	0	0	0	0	0	0	0	0
0x1010140	0	0	0	0	0	0	0	0
0x1010144	0	0	0	0	0	0	0	0
0x1010148	0	0	0	0	0	0	0	0
0x101014c	0	0	0	0	0	0	0	0
0x1010150	0	0	0	0	0	0	0	0
0x1010154	0	0	0	0	0	0	0	0
0x1010158	0	0	0	0	0	0	0	0
0x101015c	0	0	0	0	0	0	0	0
0x1010160	0	0	0	0	0	0	0	0
0x1010164	0	0	0	0	0	0	0	0
0x1010168	0	0	0	0	0	0	0	0
0x101016c	0	0	0	0	0	0	0	0
0x1010170	0	0	0	0	0	0	0	0
0x1010174	0	0	0	0	0	0	0	0
0x1010178	0	0	0	0	0	0	0	0
0x101017c	0	0	0	0	0	0	0	0
0x1010180	0	0	0	0	0	0	0	0
0x1010184	0	0	0	0	0	0	0	0
0x1010188	0	0	0	0	0	0	0	0
0x101018c	0	0	0	0	0	0	0	0
0x1010190	0	0	0	0	0	0	0	0
0x1010194	0	0	0	0	0	0	0	0
0x1010198	0	0	0	0	0	0	0	0
0x101019c	0	0	0	0	0	0	0	0
0x10101a0	0	0	0	0	0	0	0	0
0x10101a4	0	0	0	0	0	0	0	0
0x10101a8	0	0	0	0	0	0	0	0
0x10101ac	0	0	0	0	0	0	0	0
0x10101b0	0	0	0	0	0	0	0	0
0x10101b4	0	0	0	0	0	0	0	0
0x10101b8	0	0	0	0	0	0	0	0
0x10101bc	0	0	0	0	0	0	0	0
0x10101c0	0	0	0	0	0	0	0	0
0x10101c4	0	0	0	0	0	0	0	0
0x10101c8	0	0	0	0	0	0	0	0
0x10101cc	0	0	0	0	0	0	0	0
0x10101d0	0	0	0	0	0	0	0	0
0x10101d4	0	0	0	0	0	0	0	0
0x10101d8	0	0	0	0	0	0	0	0
0x10101dc	0	0	0	0	0	0	0	0
0x10101e0	0	0	0	0	0	0	0	0
0x10101e4	0	0	0	0	0	0	0	0
0x10101e8	0	0	0	0	0	0	0	0
0x10101ec	0	0	0	0	0	0	0	0
0x10101f0	0	0	0	0	0	0	0	0
0x10101f4	0	0	0	0	0	0	0	0
0x10101f8	0	0	0	0	0	0	0	0
0x10101fc	0	0	0	0	0	0	0	0
0x1010200	0	0	0	0	0	0	0	0
0x1010204	0	0	0	0	0	0	0	0
0x1010208	0	0	0	0	0	0	0	0
0x101020c	0	0	0	0	0	0	0	0
0x1010210	0	0	0	0	0	0	0	0
0x1010214	0	0	0	0	0	0	0	0
0x1010218	0	0	0	0	0	0	0	0
0x101021c	0	0	0	0	0	0	0	0
0x1010220	0	0	0	0	0	0	0	0
0x1010224	0	0	0	0	0	0	0	0
0x1010228	0	0	0	0	0	0	0	0
0x101022c	0	0	0	0	0	0	0	0
0x1010230	0	0	0	0	0	0	0	0
0x1010234	0	0	0	0	0	0	0	0
0x1010238	0	0	0	0	0	0	0	0
0x101023c	0	0	0	0	0	0	0	0
0x1010240	0	0	0	0	0	0	0	0
0x1010244	0	0	0	0	0	0	0	0
0x1010248	0	0	0	0	0	0	0	0
0x101024c	0	0	0	0	0	0	0	0
0x1010250	0	0	0	0	0	0	0	0
0x1010254	0	0	0	0	0	0	0	0
0x1010258	0	0	0	0	0	0	0	0
0x101025c	0	0	0	0	0	0	0	0
0x1010260	0	0	0	0	0	0	0	0
0x1010264	0	0	0	0	0	0	0	0
0x1010268	0	0	0	0	0	0	0	0
0x101026c	0	0	0	0	0	0	0	0
0x1010270	0	0	0	0	0	0	0	0
0x1010274	0	0	0	0	0	0	0	0
0x1010278	0	0	0	0	0	0	0	0
0x101027c	0	0	0	0	0	0	0	0
0x1010280	0	0	0	0	0	0	0	0
0x1010284	0	0	0	0	0	0	0	0
0x1010288	0	0	0	0	0	0	0	0
0x101028c	0	0	0	0	0	0	0	0
0x1010290	0	0	0	0	0	0	0	0
0x1010294	0	0	0	0	0	0	0	0
0x1010298	0	0	0	0	0	0	0	0
0x101029c	0	0	0	0	0	0	0	0
0x10102a0	0	0	0	0	0	0	0	0
0x10102a4	0	0	0	0	0	0	0	0
0x10102a8</								

Parte 2 – Programa 4

File Edit Run Settings Tools Help

Run speed at max (no interaction) 40

Registers Coproc 1 Coproc 0

Name	Number	Value
\$ra	0	0
\$t0	1	0
\$t1	2	0
\$t2	3	0
\$t3	4	0
\$t4	5	0
\$t5	6	0
\$t6	7	0
\$t7	8	0
\$t8	9	0
\$t9	10	0
\$s0	11	0
\$s1	12	0
\$s2	13	0
\$s3	14	0
\$s4	15	0
\$s5	16	0
\$s6	17	0
\$s7	18	0
\$s8	19	0
\$s9	20	0
\$s10	21	0
\$s11	22	0
\$s12	23	0
\$s13	24	0
\$s14	25	0
\$s15	26	0
\$s16	27	0
\$s17	28	268469224
\$s18	29	214747514
\$s19	30	0
\$s20	31	0
\$f0		0
\$f1		0
\$f2		0
\$f3		0
\$f4		0
\$f5		0
\$f6		0
\$f7		0
\$f8		0
\$f9		0
\$f10		0
\$f11		0
\$f12		0
\$f13		0
\$f14		0
\$f15		0
\$f16		0
\$f17		0
\$f18		0
\$f19		0
\$f20		0
\$f21		0
\$f22		0
\$f23		0
\$f24		0
\$f25		0
\$f26		0
\$f27		0
\$f28		0
\$f29		0
\$f30		0
\$f31		0
\$f32		0
\$f33		0
\$f34		0
\$f35		0
\$f36		0
\$f37		0
\$f38		0
\$f39		0
\$f40		0
\$f41		0
\$f42		0
\$f43		0
\$f44		0
\$f45		0
\$f46		0
\$f47		0
\$f48		0
\$f49		0
\$f50		0
\$f51		0
\$f52		0
\$f53		0
\$f54		0
\$f55		0
\$f56		0
\$f57		0
\$f58		0
\$f59		0
\$f60		0
\$f61		0
\$f62		0
\$f63		0
\$f64		0
\$f65		0
\$f66		0
\$f67		0
\$f68		0
\$f69		0
\$f70		0
\$f71		0
\$f72		0
\$f73		0
\$f74		0
\$f75		0
\$f76		0
\$f77		0
\$f78		0
\$f79		0
\$f80		0
\$f81		0
\$f82		0
\$f83		0
\$f84		0
\$f85		0
\$f86		0
\$f87		0
\$f88		0
\$f89		0
\$f90		0
\$f91		0
\$f92		0
\$f93		0
\$f94		0
\$f95		0
\$f96		0
\$f97		0
\$f98		0
\$f99		0
\$f100		0
\$f101		0
\$f102		0
\$f103		0
\$f104		0
\$f105		0
\$f106		0
\$f107		0
\$f108		0
\$f109		0
\$f110		0
\$f111		0
\$f112		0
\$f113		0
\$f114		0
\$f115		0
\$f116		0
\$f117		0
\$f118		0
\$f119		0
\$f120		0
\$f121		0
\$f122		0
\$f123		0
\$f124		0
\$f125		0
\$f126		0
\$f127		0
\$f128		0
\$f129		0
\$f130		0
\$f131		0
\$f132		0
\$f133		0
\$f134		0
\$f135		0
\$f136		0
\$f137		0
\$f138		0
\$f139		0
\$f140		0
\$f141		0
\$f142		0
\$f143		0
\$f144		0
\$f145		0
\$f146		0
\$f147		0
\$f148		0
\$f149		0
\$f150		0
\$f151		0
\$f152		0
\$f153		0
\$f154		0
\$f155		0
\$f156		0
\$f157		0
\$f158		0
\$f159		0
\$f160		0
\$f161		0
\$f162		0
\$f163		0
\$f164		0
\$f165		0
\$f166		0
\$f167		0
\$f168		0
\$f169		0
\$f170		0
\$f171		0
\$f172		0
\$f173		0
\$f174		0
\$f175		0
\$f176		0
\$f177		0
\$f178		0
\$f179		0
\$f180		0
\$f181		0
\$f182		0
\$f183		0
\$f184		0
\$f185		0
\$f186		0
\$f187		0
\$f188		0
\$f189		0
\$f190		0
\$f191		0
\$f192		0
\$f193		0
\$f194		0
\$f195		0
\$f196		0
\$f197		0
\$f198		0
\$f199		0
\$f200		0
\$f201		0
\$f202		0
\$f203		0
\$f204		0
\$f205		0
\$f206		0
\$f207		0
\$f208		0
\$f209		0
\$f210		0
\$f211		0
\$f212		0
\$f213		0
\$f214		0
\$f215		0
\$f216		0
\$f217		0
\$f218		0
\$f219		0
\$f220		0
\$f221		0
\$f222		0
\$f223		0
\$f224		0
\$f225		0
\$f226		0
\$f227		0
\$f228		0
\$f229		0
\$f230		0
\$f231		0
\$f232		0
\$f233		0
\$f234		0
\$f235		0
\$f236		0
\$f237		0
\$f238		0
\$f239		0
\$f240		0
\$f241		0
\$f242		0
\$f243		0
\$f244		0
\$f245		0
\$f246		0
\$f247		0
\$f248		0
\$f249		0
\$f250		0
\$f251		0
\$f252		0
\$f253		0
\$f254		0
\$f255		0
\$f256		0
\$f257		0
\$f258		0
\$f259		0
\$f260		0
\$f261		0
\$f262		0
\$f263		0
\$f264		0
\$f265		0
\$f266		0
\$f267		0
\$f268		0
\$f269		0
\$f270		0
\$f271		0
\$f272		0
\$f273		0
\$f274		0
\$f275		0
\$f276		0
\$f277		0
\$f278		0
\$f279		0
\$f280		0
\$f281		0
\$f282		0
\$f283		0
\$f284		0
\$f285		0
\$f286		0
\$f287		0
\$f288		0
\$f289		0
\$f290		0
\$f291		0
\$f292		0
\$f293		0
\$f294		0
\$f295		0
\$f296		0
\$f297		0
\$f298		0
\$f299		0
\$f300		0
\$f301		0
\$f302		0
\$f303		0
\$f304		0
\$f305		0
\$f306		0
\$f307		0
\$f308		0
\$f309		0
\$f310		0
\$f311		0
\$f312		0
\$f313		0
\$f314		0
\$f315		0
\$f316		0
\$f317		0
\$f318		0
\$f319		0
\$f320		0
\$f321		0
\$f322		0
\$f323		0
\$f324		0
\$f325		0
\$f326		0
\$f327		0
\$f328		0
\$f329		0
\$f330		0
\$f331		0
\$f332		0
\$f333		0
\$f334		0
\$f335		0
\$f336		0
\$f337		0
\$f338		0
\$f339		0
\$f340		0
\$f341		0
\$f342		0
\$f343		0
\$f344		0
\$f345		0
\$f346		0
\$f347		0
\$f348		0
\$f349		0
\$f350		0
\$f351		0
\$f352		0
\$f353		0
\$f354		0
\$f355		0
\$f356		0
\$f357		0
\$f358		0
\$f359		0
\$f360		0
\$f361		0
\$f362		0
\$f363		0
\$f364		0
\$f365		0
\$f366		0
\$f367		0
\$f368		0
\$f369		0
\$f370		0
\$f371		0
\$f372		0
\$f373		0
\$f374		0
\$f375		0
\$f376		0
\$f377		0
\$f378		0
\$f379		0
\$f380		0
\$f381		0
\$f382		0
\$f383		0
\$f384		0
\$f385		0
\$f386		0
\$f387		0
\$f388		0
\$f389		0
\$f390		0
\$f391		0
\$f392		0
\$f393		0
\$f394		0
\$f395		0
\$f396		0
\$f397		0
\$f398		0
\$f399		0
\$f400		0
\$f401		0
\$f402		0
\$f403		0
\$f404		0
\$f405		0
\$f406		0
\$f407		0
\$f408		0
\$f409		0
\$f410		0
\$f411		0
\$f412		0
\$f413		0
\$f414		0
\$f415		0
\$f416		0
\$f417		0
\$f418		0
\$f419		0
\$f420		0
\$f421		0
\$f422		0
\$f423		0
\$f424		0
\$f425		0
\$f426		0
\$f427		0
\$f428		0
\$f429		0
\$f430		0
\$f431		0
\$f432		0
\$f433		0
\$f434		0
\$f435		0
\$f436		0
\$f437		0
\$f438		0
\$f439		0
\$f440		0
\$f441		0
\$f442		0
\$f443		0
\$f444		0
\$f445		0
\$f446		0
\$f447		0
\$f448		0
\$f449		0
\$f450		0
\$f451		0
\$f452		0
\$f453		0
\$f454		0
\$f455		0
\$f456		0
\$f457		0
\$f458		0
\$f459		0
\$f460		0
\$f461		0
\$f462		0
\$f463		0
\$f464		0
\$f465		0
\$f466		0
\$f467		0
\$f468		0
\$f469		0
\$f470		0
\$f471		0
\$f472		0
\$f473		0
\$f474		0
\$f475		0
\$f476		0
\$f477		0
\$f478		0
\$f479		0
\$f480		0
\$f481		0
\$f482		0
\$f483		0
\$f484		0
\$f485		0
\$f486		0
\$f487		0
\$f488		0
\$f489		0
\$f490		0
\$f491		0
\$f492		0
\$f493		0
\$f494		0
\$f495		0
\$f496		0
\$f497		0
\$f498		0
\$f499		0
\$f500		0
\$f501		0
\$f502		0

Parte 2 – Programa 4

File Edit Run Settings Tools Help

Run speed at max (no interaction) 40

Registers Coproc 1 Coproc 0

Source

Dispt	Address	Code	Basic	Source
	0x00000000	0x00000000	addi \$t0, \$zero, 3 + 4 = 7	
	0x00000004	0x00100004	addi \$t1, \$t0, 4	2: addi \$t1, \$zero, 4 + 4 = 8
	0x00000008	0x00000000	addi \$t2, \$t0, 2	4: addi \$t2, \$zero, 2 + 4 variavel temperatura que vai ser dobrada
	0x0000000C	0x00100010	addi \$t3, \$t1, 4	3: addi \$t3, \$t0, 4
	0x00000010	0x00100020	sub \$t4, \$t0, \$t0	5: sub \$t4, \$t0, \$t0
	0x00000014	0x00000000	addi \$t5, \$t0, 2	8: addi \$t5, \$zero, 2
	0x00000018	0x00100000	addi \$t6, \$t1, 6	9: addi \$t6, \$t1, 6
	0x0000001C	0x00100020	addi \$t7, \$t1, 7	10: addi \$t7, \$t1, 7
	0x00000020	0x00100020	addi \$t8, \$t1, 8	11: addi \$t8, \$t1, 8
	0x00000024	0x00100020	addi \$t9, \$t1, 9	12: addi \$t9, \$t1, 9
	0x00000028	0x00100020	addi \$t10, \$t1, 10	14: addi \$t10, \$t1, 10
	0x0000002C	0x00100020	addi \$t11, \$t1, 11	16: addi \$t11, \$t1, 11

Registers

Name	Number	Value
\$zero	0	0
\$t0	1	0
\$t1	2	0
\$t2	3	0
\$t3	4	0
\$t4	5	0
\$t5	6	0
\$t6	7	0
\$t7	8	435
\$t8	9	268
\$t9	10	0
\$t10	11	0
\$t11	12	0
\$t12	13	0
\$t13	14	0
\$t14	15	0
\$t15	16	0
\$t16	17	4
\$t17	18	333
\$t18	19	1235
\$t19	20	0
\$t20	21	0
\$t21	22	0
\$t22	23	0
\$t23	24	0
\$t24	25	0
\$t25	26	0
\$t26	27	0
\$t27	28	268468224
\$t28	29	2147479544
\$t29	30	0
\$t30	31	0
\$t31		4194352
\$t32		0
\$t33		0

Data Segment

Address	Value (+0)	Value (+4)	Value (+8)	Value (+c)	Value (+10)	Value (+14)	Value (+18)	Value (+1c)
0x10000000	0	0	0	0	0	0	0	0
0x10000004	0	0	0	0	0	0	0	0
0x10000008	0	0	0	0	0	0	0	0
0x1000000C	0	0	0	0	0	0	0	0
0x10000010	0	0	0	0	0	0	0	0
0x10000014	0	0	0	0	0	0	0	0
0x10000018	0	0	0	0	0	0	0	0
0x1000001C	0	0	0	0	0	0	0	0
0x10000020	0	0	0	0	0	0	0	0
0x10000024	0	0	0	0	0	0	0	0
0x10000028	0	0	0	0	0	0	0	0
0x1000002C	0	0	0	0	0	0	0	0
0x10000030	0	0	0	0	0	0	0	0
0x10000034	0	0	0	0	0	0	0	0
0x10000038	0	0	0	0	0	0	0	0
0x1000003C	0	0	0	0	0	0	0	0
0x10000040	0	0	0	0	0	0	0	0
0x10000044	0	0	0	0	0	0	0	0
0x10000048	0	0	0	0	0	0	0	0
0x1000004C	0	0	0	0	0	0	0	0
0x10000050	0	0	0	0	0	0	0	0
0x10000054	0	0	0	0	0	0	0	0
0x10000058	0	0	0	0	0	0	0	0
0x1000005C	0	0	0	0	0	0	0	0
0x10000060	0	0	0	0	0	0	0	0
0x10000064	0	0	0	0	0	0	0	0
0x10000068	0	0	0	0	0	0	0	0
0x1000006C	0	0	0	0	0	0	0	0
0x10000070	0	0	0	0	0	0	0	0
0x10000074	0	0	0	0	0	0	0	0
0x10000078	0	0	0	0	0	0	0	0
0x1000007C	0	0	0	0	0	0	0	0
0x10000080	0	0	0	0	0	0	0	0
0x10000084	0	0	0	0	0	0	0	0
0x10000088	0	0	0	0	0	0	0	0
0x1000008C	0	0	0	0	0	0	0	0
0x10000090	0	0	0	0	0	0	0	0
0x10000094	0	0	0	0	0	0	0	0
0x10000098	0	0	0	0	0	0	0	0
0x1000009C	0	0	0	0	0	0	0	0
0x100000A0	0	0	0	0	0	0	0	0
0x100000A4	0	0	0	0	0	0	0	0
0x100000A8	0	0	0	0	0	0	0	0
0x100000AC	0	0	0	0	0	0	0	0
0x100000B0	0	0	0	0	0	0	0	0
0x100000B4	0	0	0	0	0	0	0	0
0x100000B8	0	0	0	0	0	0	0	0
0x100000BC	0	0	0	0	0	0	0	0
0x100000C0	0	0	0	0	0	0	0	0
0x100000C4	0	0	0	0	0	0	0	0
0x100000C8	0	0	0	0	0	0	0	0
0x100000CC	0	0	0	0	0	0	0	0
0x100000D0	0	0	0	0	0	0	0	0
0x100000D4	0	0	0	0	0	0	0	0
0x100000D8	0	0	0	0	0	0	0	0
0x100000DC	0	0	0	0	0	0	0	0
0x100000E0	0	0	0	0	0	0	0	0
0x100000E4	0	0	0	0	0	0	0	0
0x100000E8	0	0	0	0	0	0	0	0
0x100000EC	0	0	0	0	0	0	0	0
0x100000F0	0	0	0	0	0	0	0	0
0x100000F4	0	0	0	0	0	0	0	0
0x100000F8	0	0	0	0	0	0	0	0
0x100000FC	0	0	0	0	0	0	0	0
0x10000100	0	0	0	0	0	0	0	0
0x10000104	0	0	0	0	0	0	0	0
0x10000108	0	0	0	0	0	0	0	0
0x1000010C	0	0	0	0	0	0	0	0
0x10000110	0	0	0	0	0	0	0	0
0x10000114	0	0	0	0	0	0	0	0
0x10000118	0	0	0	0	0	0	0	0
0x1000011C	0	0	0	0	0	0	0	0
0x10000120	0	0	0	0	0	0	0	0
0x10000124	0	0	0	0	0	0	0	0
0x10000128	0	0	0	0	0	0	0	0
0x1000012C	0	0	0	0	0	0	0	0
0x10000130	0	0	0	0	0	0	0	0
0x10000134	0	0	0	0	0	0	0	0
0x10000138	0	0	0	0	0	0	0	0
0x1000013C	0	0	0	0	0	0	0	0
0x10000140	0	0	0	0	0	0	0	0
0x10000144	0	0	0	0	0	0	0	0
0x10000148	0	0	0	0	0	0	0	0
0x1000014C	0	0	0	0	0	0	0	0
0x10000150	0	0	0	0	0	0	0	0
0x10000154	0	0	0	0	0	0	0	0
0x10000158	0	0	0	0	0	0	0	0
0x1000015C	0	0	0	0	0	0	0	0
0x10000160	0	0	0	0	0	0	0	0
0x10000164	0	0	0	0	0	0	0	0
0x10000168	0	0	0	0	0	0	0	0
0x1000016C	0	0	0	0	0	0	0	0
0x10000170	0	0	0	0	0	0	0	0
0x10000174	0	0	0	0	0	0	0	0
0x10000178	0	0	0	0	0	0	0	0
0x1000017C	0	0	0	0	0	0	0	0
0x10000180	0	0	0	0	0	0	0	0
0x10000184	0	0	0	0	0	0	0	0
0x10000188	0	0	0	0	0	0	0	0
0x1000018C	0	0	0	0	0	0	0	0
0x10000190	0	0	0	0	0	0	0	0
0x10000194	0	0	0	0	0	0	0	0
0x10000198	0	0	0	0	0	0	0	0
0x1000019C	0	0	0	0	0	0	0	0
0x100001A0	0	0	0	0	0	0	0	0
0x100001A4	0	0	0	0	0	0	0	0
0x100001A8	0	0	0	0	0	0	0	0
0x100001AC	0	0	0	0	0	0	0	0
0x100001B0	0	0	0	0	0	0	0	0
0x100001B4	0	0	0	0	0	0	0	0
0x100001B8	0	0	0	0	0	0	0	0
0x100001BC	0	0	0	0	0	0	0	0
0x100001C0	0	0	0	0	0	0	0	0
0x100001C4	0	0	0	0	0	0	0	0
0x100001C8	0	0	0	0	0	0	0	0
0x100001CC	0	0	0	0	0	0	0	0
0x100001D0	0	0	0	0	0	0	0	0
0x100001D4	0	0	0	0	0	0	0	0
0x100001D8	0	0	0	0	0	0	0	0
0x100001DC	0	0	0	0	0	0	0	0
0x100001E0	0	0	0	0	0	0	0	0
0x100001E4	0	0	0	0	0	0	0	0
0x100001E8	0	0	0	0	0	0	0	0
0x100001EC	0	0	0	0	0	0	0	0
0x100001F0	0	0	0	0	0	0	0	0
0x100001F4	0	0	0	0	0	0	0	0
0x100001F8	0	0	0	0	0	0	0	0
0x100001FC	0	0	0	0	0	0	0	0
0x10000200	0	0	0	0	0	0	0	0
0x10000204	0	0	0	0	0	0	0	0
0x10000208	0	0	0	0	0	0	0	0
0x1000020C	0	0	0	0	0	0	0	0
0x10000210	0	0	0	0	0	0	0	0
0x10000214	0	0	0	0	0	0	0	0
0x10000218	0	0	0	0	0	0	0	0
0x1000021C	0	0	0	0	0	0	0	0
0x10000220	0	0	0	0	0	0	0	0
0x10000224	0	0	0	0	0	0	0	0
0x10000228	0	0	0	0	0	0	0	0
0x1000022C	0	0	0	0	0	0	0	0
0x10000230	0	0	0	0	0	0	0	0
0x10000234	0	0	0	0	0	0	0	0
0x10000238	0	0	0	0	0	0	0	0
0x1000023C	0	0	0	0	0	0	0	0
0x10000240	0	0	0	0	0	0	0	0
0x10000244	0	0	0	0	0	0	0	0
0x10000248	0	0	0	0	0	0	0	0
0x1000024C	0	0	0	0	0	0	0	0
0x10000250	0	0	0	0	0	0	0	0
0x10000254	0	0	0	0	0	0	0	0
0x10000258	0	0	0	0	0	0	0	0
0x1000025C	0	0	0	0	0	0	0	0
0x10000260	0	0	0	0	0	0	0	0
0x10000264	0	0	0	0	0			

Parte 2 – Programa 5

File Edit Run Settings Tools Help

Run speed at max (no interaction)

40

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

Edit Execute

program5.asm

```
addi $s0, $zero, 100000 # x = 100000
addi $s1, $zero, 200000 # y = 200000
add $s2, $s0, $s1 # z = x + y
```

Registers Coproc 1 Coproc 0

Name	Number	Value
\$ra	0	0
\$fs	1	0
\$v0	2	0
\$v1	3	0
\$s0	4	0
\$s1	5	0
\$s2	6	0
\$s3	7	0
\$s4	8	0
\$s5	9	0
\$s6	10	0
\$s7	11	0
\$s8	12	0
\$s9	13	0
\$s10	14	0
\$s11	15	0
\$s12	16	0
\$s13	17	0
\$s14	18	0
\$s15	19	0
\$s16	20	0
\$s17	21	0
\$s18	22	0
\$s19	23	0
\$s20	24	0
\$s21	25	0
\$s22	26	0
\$s23	27	0
\$gp	28	268688224
\$fp	29	2147479104
\$sp	30	0
\$ra	31	0
\$0		4194300
\$1		0
\$2		0

Line: 1 Column: 1 Show Line Numbers

Mars Messages Run IO

Reset: reset completed.

Reset: reset completed.

Reset: reset completed.

Clear

-- program is finished running (dropped off bottom) --

-- program is finished running (dropped off bottom) --

-- program is finished running (dropped off bottom) --

Parte 2 – Programa 5

File Edit Run Settings Tools Help

Run speed at max (no interaction) 40

Registers Coproc 1 Coproc 0

Name	Number	Value
PC	0	0
PC+1	1	200000
PC+2	2	0
PC+3	3	0
PC+4	4	0
PC+5	5	0
PC+6	6	0
PC+7	7	0
PC+8	8	0
PC+9	9	0
PC+10	10	0
PC+11	11	0
PC+12	12	0
PC+13	13	0
PC+14	14	0
PC+15	15	0
PC+16	16	100000
PC+17	17	200000
PC+18	18	300000
PC+19	19	0
PC+20	20	0
PC+21	21	0
PC+22	22	0
PC+23	23	0
PC+24	24	0
PC+25	25	0
PC+26	26	0
PC+27	27	0
PC+28	28	268468224
PC+29	29	214747514
PC+30	30	0
PC+31	31	0
PC+32	32	4194332
PC+33	33	0
PC+34	34	0

Address	Value (+0)	Value (+4)	Value (+8)	Value (+c)	Value (+10)	Value (+14)	Value (+18)	Value (+1c)
0x10010000	0	0	0	0	0	0	0	0
0x10010004	0	0	0	0	0	0	0	0
0x10010008	0	0	0	0	0	0	0	0
0x1001000c	0	0	0	0	0	0	0	0
0x10010010	0	0	0	0	0	0	0	0
0x10010014	0	0	0	0	0	0	0	0
0x10010018	0	0	0	0	0	0	0	0
0x1001001c	0	0	0	0	0	0	0	0
0x10010020	0	0	0	0	0	0	0	0
0x10010024	0	0	0	0	0	0	0	0
0x10010028	0	0	0	0	0	0	0	0
0x1001002c	0	0	0	0	0	0	0	0
0x10010030	0	0	0	0	0	0	0	0
0x10010034	0	0	0	0	0	0	0	0
0x10010038	0	0	0	0	0	0	0	0
0x1001003c	0	0	0	0	0	0	0	0
0x10010040	0	0	0	0	0	0	0	0
0x10010044	0	0	0	0	0	0	0	0
0x10010048	0	0	0	0	0	0	0	0
0x1001004c	0	0	0	0	0	0	0	0
0x10010050	0	0	0	0	0	0	0	0

Text Segment Data Segment

Mar Message Run IO

Reset: reset completed.

Reset: reset completed.

Clear

-- program is finished running (dropped off bottom) --

-- program is finished running (dropped off bottom) --

-- program is finished running (dropped off bottom) --

-- program is finished running (dropped off bottom) --

Parte 2 – Programa 6

The screenshot displays a MIPS simulator interface. The top menu bar includes 'File', 'Edit', 'Run', 'Settings', 'Tools', and 'Help'. Below the menu is a toolbar with icons for file operations and execution. A 'Run speed at max (no interaction)' slider is set to 40. The main window is divided into three sections: a code editor on the left, a registers window on the right, and a message log at the bottom.

Code Editor: The assembly code for 'program6.asm' is as follows:

```
program6.asm
addi $t0, $zero, 0x7FFF # Maior int possível
sll $t0, $t0, 16 # Empurra para o início
ori $s0, $t0, 0xFFFF # Complementa o número

addi $t0, $zero, 0x3000 # Adiciona os 4 primeiros bits
sll $s1, $t0, 8 # Empurra os bits para o início

sll $s1, $s1, 2 # 4 * y
sub $s2, $s0, $s1 # z = x - 4*y
```

Registers Window: The registers are listed in a table with columns for Name, Number, and Value.

Name	Number	Value
\$ra	0	0
\$t0	1	0
\$t1	2	0
\$t2	3	0
\$t3	4	0
\$t4	5	0
\$t5	6	0
\$t6	7	0
\$t7	8	0
\$t8	9	0
\$t9	10	0
\$s0	11	0
\$s1	12	0
\$s2	13	0
\$s3	14	0
\$s4	15	0
\$s5	16	0
\$s6	17	0
\$s7	18	0
\$s8	19	0
\$s9	20	0
\$s10	21	0
\$s11	22	0
\$s12	23	0
\$s13	24	0
\$s14	25	0
\$s15	26	0
\$s16	27	0
\$s17	28	26868224
\$s18	29	2147479512
\$s19	30	0
\$s20	31	0
\$f0		0
\$f1		0
\$f2		0

Message Log: The log shows the following messages:

- Reset: reset completed.
- Reset: reset completed.
- Clear
- program is finished running (dropped off bottom) --
- program is finished running (dropped off bottom) --
- program is finished running (dropped off bottom) --
- program is finished running (dropped off bottom) --

Parte 2 – Programa 6

File Edit Run Settings Tools Help

Run speed at max (no interaction) 40

Registers Coproc 1 Coproc 0

Name	Number	Value
R0	0	0
R1	1	0
R2	2	0
R3	3	0
R4	4	0
R5	5	0
R6	6	0
R7	7	0
R8	8	12288
R9	9	0
R10	10	0
R11	11	0
R12	12	0
R13	13	0
R14	14	0
R15	15	0
R16	16	0
R17	17	0
R18	18	2147483648
R19	19	12592912
R20	20	2134900735
R21	21	0
R22	22	0
R23	23	0
R24	24	0
R25	25	0
R26	26	0
R27	27	0
R28	28	268468224
R29	29	2147479544
R30	30	0
R31	31	0
R32	32	0
R33	33	0
R34	34	0
R35	35	0
R36	36	0
R37	37	0
R38	38	0
R39	39	0
R40	40	0
R41	41	0
R42	42	0
R43	43	0
R44	44	0
R45	45	0
R46	46	0
R47	47	0
R48	48	0
R49	49	0
R50	50	0
R51	51	0
R52	52	0
R53	53	0
R54	54	0
R55	55	0
R56	56	0
R57	57	0
R58	58	0
R59	59	0
R60	60	0
R61	61	0
R62	62	0
R63	63	0
R64	64	0
R65	65	0
R66	66	0
R67	67	0
R68	68	0
R69	69	0
R70	70	0
R71	71	0
R72	72	0
R73	73	0
R74	74	0
R75	75	0
R76	76	0
R77	77	0
R78	78	0
R79	79	0
R80	80	0
R81	81	0
R82	82	0
R83	83	0
R84	84	0
R85	85	0
R86	86	0
R87	87	0
R88	88	0
R89	89	0
R90	90	0
R91	91	0
R92	92	0
R93	93	0
R94	94	0
R95	95	0
R96	96	0
R97	97	0
R98	98	0
R99	99	0
R100	100	0
R101	101	0
R102	102	0
R103	103	0
R104	104	0
R105	105	0
R106	106	0
R107	107	0
R108	108	0
R109	109	0
R110	110	0
R111	111	0
R112	112	0
R113	113	0
R114	114	0
R115	115	0
R116	116	0
R117	117	0
R118	118	0
R119	119	0
R120	120	0
R121	121	0
R122	122	0
R123	123	0
R124	124	0
R125	125	0
R126	126	0
R127	127	0
R128	128	0
R129	129	0
R130	130	0
R131	131	0
R132	132	0
R133	133	0
R134	134	0
R135	135	0
R136	136	0
R137	137	0
R138	138	0
R139	139	0
R140	140	0
R141	141	0
R142	142	0
R143	143	0
R144	144	0
R145	145	0
R146	146	0
R147	147	0
R148	148	0
R149	149	0
R150	150	0
R151	151	0
R152	152	0
R153	153	0
R154	154	0
R155	155	0
R156	156	0
R157	157	0
R158	158	0
R159	159	0
R160	160	0
R161	161	0
R162	162	0
R163	163	0
R164	164	0
R165	165	0
R166	166	0
R167	167	0
R168	168	0
R169	169	0
R170	170	0
R171	171	0
R172	172	0
R173	173	0
R174	174	0
R175	175	0
R176	176	0
R177	177	0
R178	178	0
R179	179	0
R180	180	0
R181	181	0
R182	182	0
R183	183	0
R184	184	0
R185	185	0
R186	186	0
R187	187	0
R188	188	0
R189	189	0
R190	190	0
R191	191	0
R192	192	0
R193	193	0
R194	194	0
R195	195	0
R196	196	0
R197	197	0
R198	198	0
R199	199	0
R200	200	0
R201	201	0
R202	202	0
R203	203	0
R204	204	0
R205	205	0
R206	206	0
R207	207	0
R208	208	0
R209	209	0
R210	210	0
R211	211	0
R212	212	0
R213	213	0
R214	214	0
R215	215	0
R216	216	0
R217	217	0
R218	218	0
R219	219	0
R220	220	0
R221	221	0
R222	222	0
R223	223	0
R224	224	0
R225	225	0
R226	226	0
R227	227	0
R228	228	0
R229	229	0
R230	230	0
R231	231	0
R232	232	0
R233	233	0
R234	234	0
R235	235	0
R236	236	0
R237	237	0
R238	238	0
R239	239	0
R240	240	0
R241	241	0
R242	242	0
R243	243	0
R244	244	0
R245	245	0
R246	246	0
R247	247	0
R248	248	0
R249	249	0
R250	250	0
R251	251	0
R252	252	0
R253	253	0
R254	254	0
R255	255	0
R256	256	0
R257	257	0
R258	258	0
R259	259	0
R260	260	0
R261	261	0
R262	262	0
R263	263	0
R264	264	0
R265	265	0
R266	266	0
R267	267	0
R268	268	0
R269	269	0
R270	270	0
R271	271	0
R272	272	0
R273	273	0
R274	274	0
R275	275	0
R276	276	0
R277	277	0
R278	278	0
R279	279	0
R280	280	0
R281	281	0
R282	282	0
R283	283	0
R284	284	0
R285	285	0
R286	286	0
R287	287	0
R288	288	0
R289	289	0
R290	290	0
R291	291	0
R292	292	0
R293	293	0
R294	294	0
R295	295	0
R296	296	0
R297	297	0
R298	298	0
R299	299	0
R300	300	0
R301	301	0
R302	302	0
R303	303	0
R304	304	0
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R307	307	0
R308	308	0
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R317	317	0
R318	318	0
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R322	322	0
R323	323	0
R324	324	0
R325	325	0
R326	326	0
R327	327	0
R328	328	0
R329	329	0
R330	330	0
R331	331	0
R332	332	0
R333	333	0
R334	334	0
R335	335	0
R336	336	0
R337	337	0
R338	338	0
R339	339	0
R340	340	0
R341	341	0
R342	342	0
R343	343	0
R344	344	0
R345	345	0
R346	346	0
R347	347	0
R348	348	0
R349	349	0
R350	350	0
R351	351	0
R352	352	0
R353	353	0
R354	354	0
R355	355	0
R356	356	0
R357	357	0
R358	358	0
R359	359	0
R360	360	0
R361	361	0
R362	362	0
R363	363	0
R364	364	0
R365	365	0
R366	366	0
R367	367	0
R368	368	0
R369	369	0
R370	370	0
R371	371	0
R372	372	0
R373	373	0
R374	374	0
R375	375	0
R376	376	0
R377	377	0
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R379	379	0
R380	380	0
R381	381	0
R382	382	0
R383	383	0
R384	384	0
R385	385	0
R386	386	0
R387	387	0
R388	388	0
R389	389	0
R390	390	0
R391	391	0
R392	392	0
R393	393	0
R394	394	0
R395	395	0
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R397	397	0
R398	398	0
R399	399	0
R400	400	0
R401	401	0
R402	402	0
R403	403	0
R404	404	0
R405	405	0
R406	406	0
R407	407	0
R408	408	0
R409	409	0
R410	410	0
R411	411	0
R412	412	0
R413	413	0
R414	414	0
R415	415	0
R416	416	0
R417	417	0
R418	418	0
R419	419	0
R420	420	0
R421	421	0
R422	422	0
R423	423	0
R424	424	0
R425	425	0
R426	426	0
R427	427	0
R428	428	0
R429	429	0
R430	430	0
R431	431	0
R432	432	0
R433	433	0
R434	434	0
R435	435	0
R436	436	0
R437	437	0
R438	438	0
R439	439	0
R440	440	0
R441	441	0
R442	442	0
R443	443	0
R444	444	0
R445	445	0
R446	446	0
R447	447	0
R448	448	0
R449	449	0
R450	450	0
R451	451	0
R452	452	0
R453	453	0
R454	454	0
R455	455	0
R456	456	0
R457	457	0
R458	458	0
R459	459	0
R460	460	0
R461	461	0
R462	462	0
R463	463	0
R464	464	0
R465	465	0
R466	466	0
R467	467	0
R468	468	0
R469	469	0
R470	470	0
R471	471	0
R472	472	0
R473	473	0
R474	474	0
R475	475	0
R476	476	0
R477	4	

Parte 2 – Programa 7

File Edit Run Settings Tools Help

Run speed at max (no interaction) 40

program7.asm

```
ori $8, $zero, 0x01 # $8 = 1
sll $8, $8, 31 # $8 = 0x80000000
sra $8, $8, 31 # $8 = 0xFFFFFFFF
```

Registers Coproc 1 Coproc 0

Name	Number	Value
\$ra	0	0
\$t0	1	0
\$t1	2	0
\$t2	3	0
\$t3	4	0
\$t4	5	0
\$t5	6	0
\$t6	7	0
\$t7	8	0
\$t8	9	0
\$t9	10	0
\$s0	11	0
\$s1	12	0
\$s2	13	0
\$s3	14	0
\$s4	15	0
\$s5	16	0
\$s6	17	0
\$s7	18	0
\$s8	19	0
\$s9	20	0
\$s10	21	0
\$s11	22	0
\$s12	23	0
\$s13	24	0
\$s14	25	0
\$s15	26	0
\$s16	27	0
\$s17	28	268469224
\$s18	29	2147479512
\$s19	30	0
\$s20	31	0
\$f0		0
\$f1		0
\$f2		0
\$f3		0
\$f4		0
\$f5		0
\$f6		0
\$f7		0
\$f8		0
\$f9		0
\$f10		0
\$f11		0
\$f12		0
\$f13		0
\$f14		0
\$f15		0
\$f16		0
\$f17		0
\$f18		0
\$f19		0
\$f20		0
\$f21		0
\$f22		0
\$f23		0
\$f24		0
\$f25		0
\$f26		0
\$f27		0
\$f28		0
\$f29		0
\$f30		0
\$f31		0

Line: 1 Column: 1 Show Line Numbers

Mars Messages Run IO

Reset: reset completed.

-- program is finished running (dropped off bottom) --

Clear

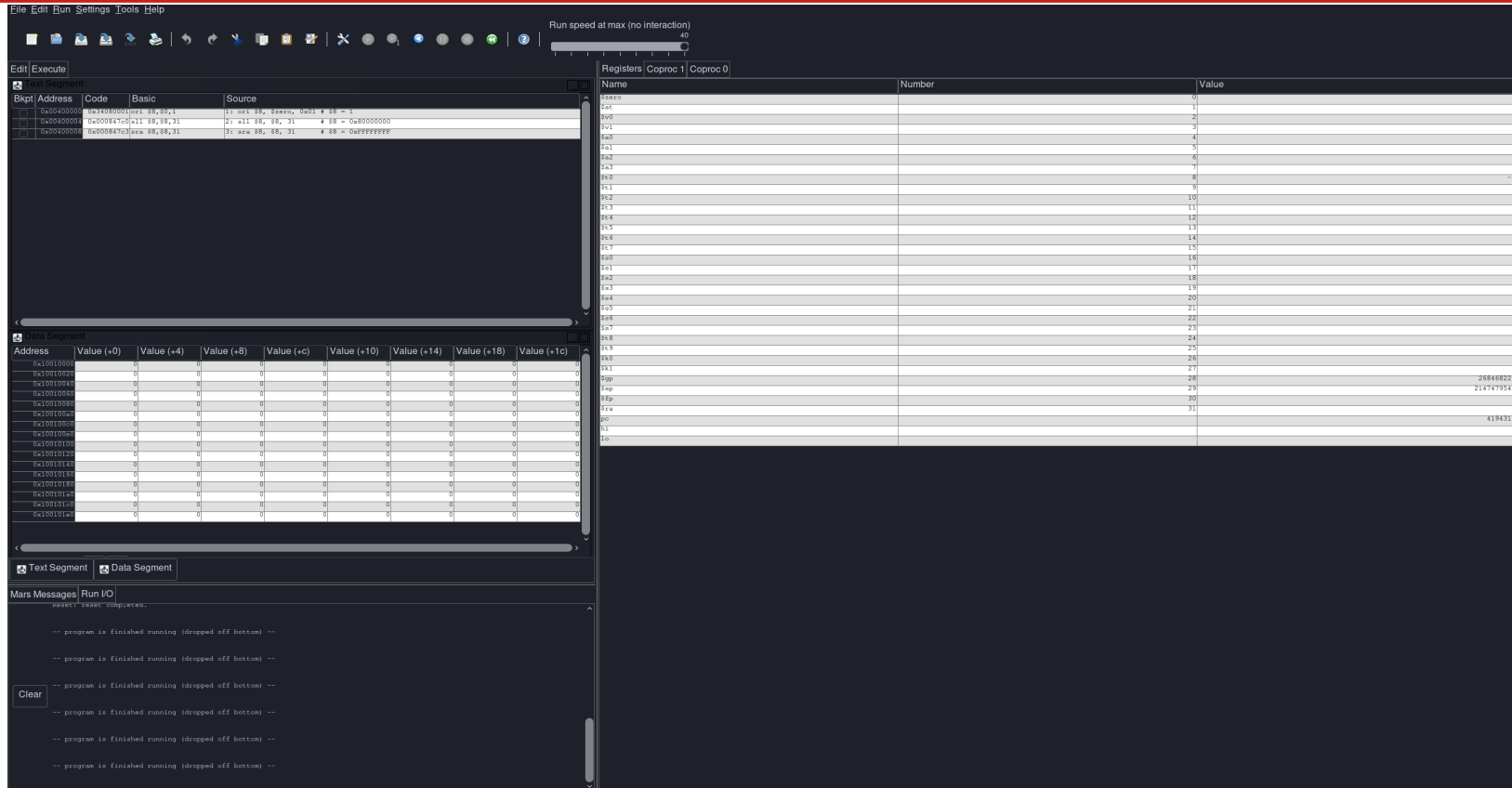
-- program is finished running (dropped off bottom) --

-- program is finished running (dropped off bottom) --

-- program is finished running (dropped off bottom) --

-- program is finished running (dropped off bottom) --

Parte 2 – Programa 7



Parte 2 – Programa 8

File Edit Run Settings Tools Help

Run speed at max (no interaction)

40

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000

program8.asm

```
addi $t0, $zero, 0x1234 # Preenche os primeiros 4 bits
sll $t0, $t0, 16 # Move pro inicio
ori $s0, $t0, 0x5678 # Junta o final do numero

srl $s1, $s0, 24 # Separa os ultimos 2 bits em $s1

sll $t0, $s0, 8 # Reorganiza o numero original
srl $s2, $t0, 24 # Separa os ultimos 2 bits em $s2

sll $t0, $s0, 16 # Reorganiza o numero original
srl $s3, $t0, 24 # Separa os ultimos 2 bits em $s3

andi $s4, $s0, 0x00FF # and com os bits restantes
```

Registers Coproc 1 Coproc 0

Name	Number	Value
\$zero	0	0
\$t0	1	0
\$t1	2	0
\$t2	3	0
\$t3	4	0
\$t4	5	0
\$t5	6	0
\$t6	7	0
\$t7	8	1450704896
\$t8	9	0
\$t9	10	0
\$s0	11	0
\$s1	12	0
\$s2	13	0
\$s3	14	0
\$s4	15	305419896
\$s5	16	0
\$s6	17	0
\$s7	18	0
\$s8	19	0
\$s9	20	120
\$s10	21	0
\$s11	22	0
\$s12	23	0
\$s13	24	0
\$s14	25	0
\$s15	26	0
\$s16	27	0
\$s17	28	268688224
\$s18	29	2147479168
\$s19	30	0
\$s20	31	0
\$s21	32	419480
\$s22	33	0
\$s23	34	0
\$s24	35	0
\$s25	36	0
\$s26	37	0
\$s27	38	0
\$s28	39	0
\$s29	40	0
\$s30	41	0
\$s31	42	0
\$s32	43	0
\$s33	44	0
\$s34	45	0
\$s35	46	0
\$s36	47	0
\$s37	48	0
\$s38	49	0
\$s39	50	0
\$s40	51	0
\$s41	52	0
\$s42	53	0
\$s43	54	0
\$s44	55	0
\$s45	56	0
\$s46	57	0
\$s47	58	0
\$s48	59	0
\$s49	60	0
\$s50	61	0
\$s51	62	0
\$s52	63	0
\$s53	64	0
\$s54	65	0
\$s55	66	0
\$s56	67	0
\$s57	68	0
\$s58	69	0
\$s59	70	0
\$s60	71	0
\$s61	72	0
\$s62	73	0
\$s63	74	0
\$s64	75	0
\$s65	76	0
\$s66	77	0
\$s67	78	0
\$s68	79	0
\$s69	80	0
\$s70	81	0
\$s71	82	0
\$s72	83	0
\$s73	84	0
\$s74	85	0
\$s75	86	0
\$s76	87	0
\$s77	88	0
\$s78	89	0
\$s79	90	0
\$s80	91	0
\$s81	92	0
\$s82	93	0
\$s83	94	0
\$s84	95	0
\$s85	96	0
\$s86	97	0
\$s87	98	0
\$s88	99	0
\$s89	100	0
\$s90	101	0
\$s91	102	0
\$s92	103	0
\$s93	104	0
\$s94	105	0
\$s95	106	0
\$s96	107	0
\$s97	108	0
\$s98	109	0
\$s99	110	0
\$s100	111	0
\$s101	112	0
\$s102	113	0
\$s103	114	0
\$s104	115	0
\$s105	116	0
\$s106	117	0
\$s107	118	0
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\$s116	127	0
\$s117	128	0
\$s118	129	0
\$s119	130	0
\$s120	131	0
\$s121	132	0
\$s122	133	0
\$s123	134	0
\$s124	135	0
\$s125	136	0
\$s126	137	0
\$s127	138	0
\$s128	139	0
\$s129	140	0
\$s130	141	0
\$s131	142	0
\$s132	143	0
\$s133	144	0
\$s134	145	0
\$s135	146	0
\$s136	147	0
\$s137	148	0
\$s138	149	0
\$s139	150	0
\$s140	151	0
\$s141	152	0
\$s142	153	0
\$s143	154	0
\$s144	155	0
\$s145	156	0
\$s146	157	0
\$s147	158	0
\$s148	159	0
\$s149	160	0
\$s150	161	0
\$s151	162	0
\$s152	163	0
\$s153	164	0
\$s154	165	0
\$s155	166	0
\$s156	167	0
\$s157	168	0
\$s158	169	0
\$s159	170	0
\$s160	171	0
\$s161	172	0
\$s162	173	0
\$s163	174	0
\$s164	175	0
\$s165	176	0
\$s166	177	0
\$s167	178	0
\$s168	179	0
\$s169	180	0
\$s170	181	0
\$s171	182	0
\$s172	183	0
\$s173	184	0
\$s174	185	0
\$s175	186	0
\$s176	187	0
\$s177	188	0
\$s178	189	0
\$s179	190	0
\$s180	191	0
\$s181	192	0
\$s182	193	0
\$s183	194	0
\$s184	195	0
\$s185	196	0
\$s186	197	0
\$s187	198	0
\$s188	199	0
\$s189	200	0
\$s190	201	0
\$s191	202	0
\$s192	203	0
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\$s195	206	0
\$s196	207	0
\$s197	208	0
\$s198	209	0
\$s199	210	0
\$s200	211	0
\$s201	212	0
\$s202	213	0
\$s203	214	0
\$s204	215	0
\$s205	216	0
\$s206	217	0
\$s207	218	0
\$s208	219	0
\$s209	220	0
\$s210	221	0
\$s211	222	0
\$s212	223	0
\$s213	224	0
\$s214	225	0
\$s215	226	0
\$s216	227	0
\$s217	228	0
\$s218	229	0
\$s219	230	0
\$s220	231	0
\$s221	232	0
\$s222	233	0
\$s223	234	0
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\$s226	237	0
\$s227	238	0
\$s228	239	0
\$s229	240	0
\$s230	241	0
\$s231	242	0
\$s232	243	0
\$s233	244	0
\$s234	245	0
\$s235	246	0
\$s236	247	0
\$s237	248	0
\$s238	249	0
\$s239	250	0
\$s240	251	0
\$s241	252	0
\$s242	253	0
\$s243	254	0
\$s244	255	0
\$s245	256	0
\$s246	257	0
\$s247	258	0
\$s248	259	0
\$s249	260	0
\$s250	261	0
\$s251	262	0
\$s252	263	0
\$s253	264	0
\$s254	265	0
\$s255	266	0
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\$s260	271	0
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\$s262	273	0
\$s263	274	0
\$s264	275	0
\$s265	276	0
\$s266	277	0
\$s267	278	0
\$s268	279	0
\$s269	280	0
\$s270	281	0
\$s271	282	0
\$s272	283	0
\$s273	284	0
\$s274	285	0
\$s275	286	0
\$s276	287	0
\$s277	288	0
\$s278	289	0
\$s279	290	0
\$s280	291	0
\$s281	292	0
\$s282	293	0
\$s283	294	0
\$s284	295	0
\$s285	296	0
\$s286	297	0
\$s287	298	0
\$s288	299	0
\$s289	300	0
\$s290	301	0
\$s291	302	0
\$s292	303	0
\$s293	304	0
\$s294	305	0
\$s295	306	0
\$s296	307	

Parte 2 – Programa 8

File Edit Run Settings Tools Help

Run speed at max (no interaction) 40

Registers Coproc 1 Coproc 0

Name	Number	Value
PC	0	0
PS	1	0
SP	2	0
BP	3	0
SI	4	0
DI	5	0
SI	6	0
DI	7	0
SI	8	1450704896
DI	9	0
SI	10	0
DI	11	0
SI	12	0
DI	13	0
SI	14	0
DI	15	0
SI	16	305419896
DI	17	15
SI	18	30
DI	19	24
SI	20	120
DI	21	0
SI	22	0
DI	23	0
SI	24	0
DI	25	0
SI	26	0
DI	27	0
SI	28	268468224
DI	29	2147479514
SI	30	0
DI	31	0
SI	32	419460
DI	33	0
SI	34	0
DI	35	0

Data Segment

Address	Value (+0)	Value (+4)	Value (+8)	Value (+c)	Value (+10)	Value (+14)	Value (+18)	Value (+20)
5x10010000	0	0	0	0	0	0	0	0
5x10010004	0	0	0	0	0	0	0	0
5x10010008	0	0	0	0	0	0	0	0
5x1001000c	0	0	0	0	0	0	0	0
5x10010010	0	0	0	0	0	0	0	0
5x10010014	0	0	0	0	0	0	0	0
5x10010018	0	0	0	0	0	0	0	0
5x1001001c	0	0	0	0	0	0	0	0
5x10010020	0	0	0	0	0	0	0	0
5x10010024	0	0	0	0	0	0	0	0
5x10010028	0	0	0	0	0	0	0	0
5x1001002c	0	0	0	0	0	0	0	0
5x10010030	0	0	0	0	0	0	0	0
5x10010034	0	0	0	0	0	0	0	0
5x10010038	0	0	0	0	0	0	0	0
5x1001003c	0	0	0	0	0	0	0	0
5x10010040	0	0	0	0	0	0	0	0
5x10010044	0	0	0	0	0	0	0	0
5x10010048	0	0	0	0	0	0	0	0
5x1001004c	0	0	0	0	0	0	0	0
5x10010050	0	0	0	0	0	0	0	0
5x10010054	0	0	0	0	0	0	0	0
5x10010058	0	0	0	0	0	0	0	0
5x1001005c	0	0	0	0	0	0	0	0

Text Segment

Mar Messages Run IO

-- program is finished running (dropped off bottom) --

-- program is finished running (dropped off bottom) --

Clear