LAB Report On
MIPS Assembly Programming (Basic) (Individual)

Lab Part 1 – Arithmetic

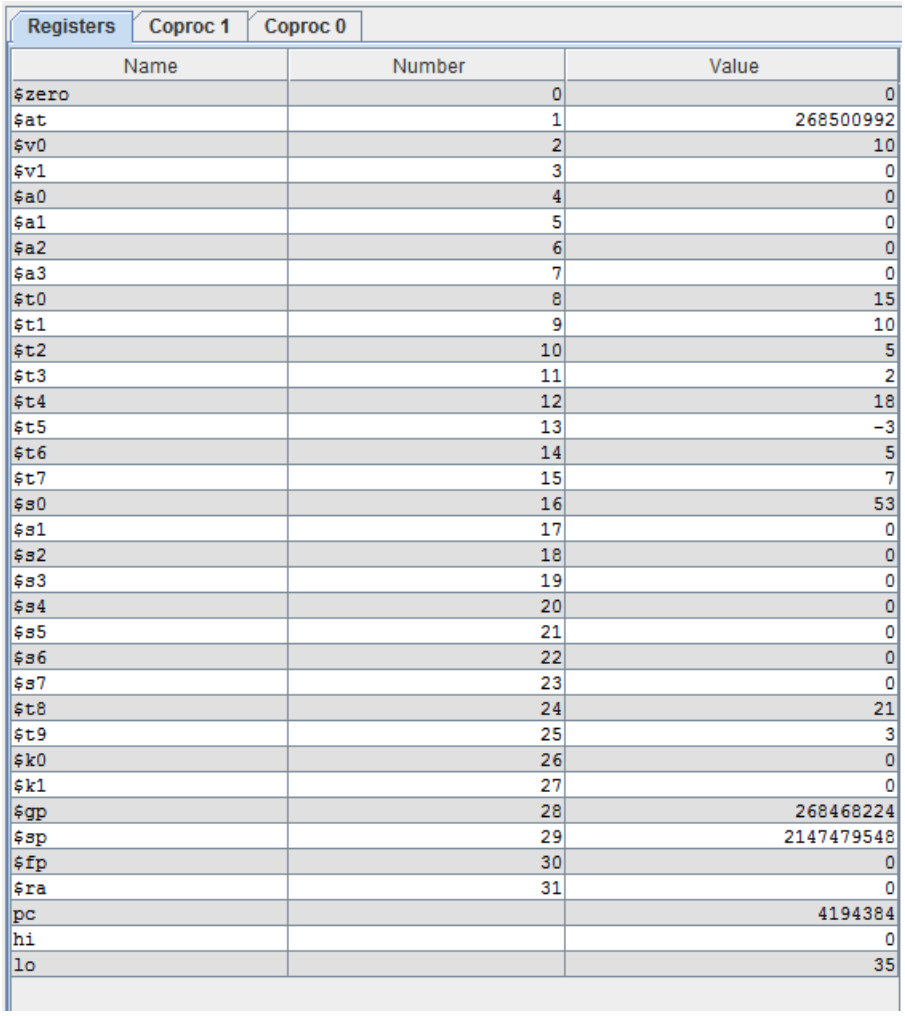
Register Panel

Before Program Execution

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
$t8	24	0
$t9	25	0
$k0	26	0
$k1	27	0
$gp	28	268468224
$sp	29	2147479548
$fp	30	0
$ra	31	0
pc		4194304
hi		0
lo		0

After Program Execution

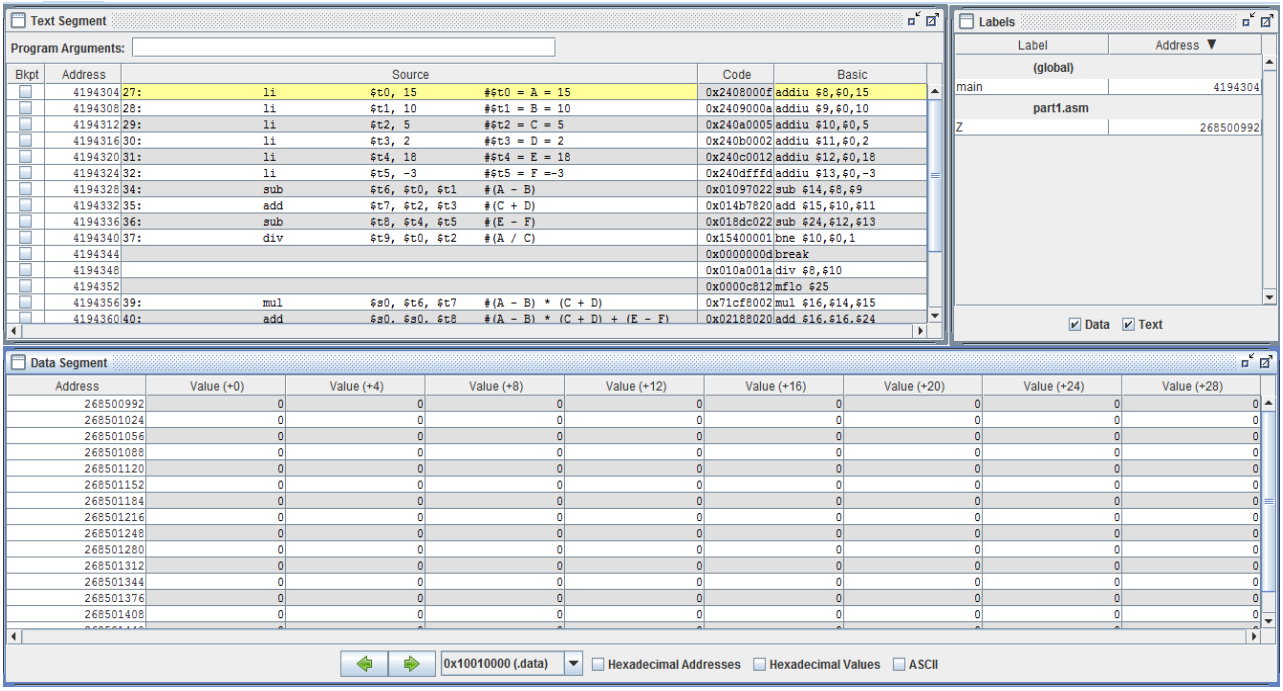


Registers | Coproc 1 | Coproc 0

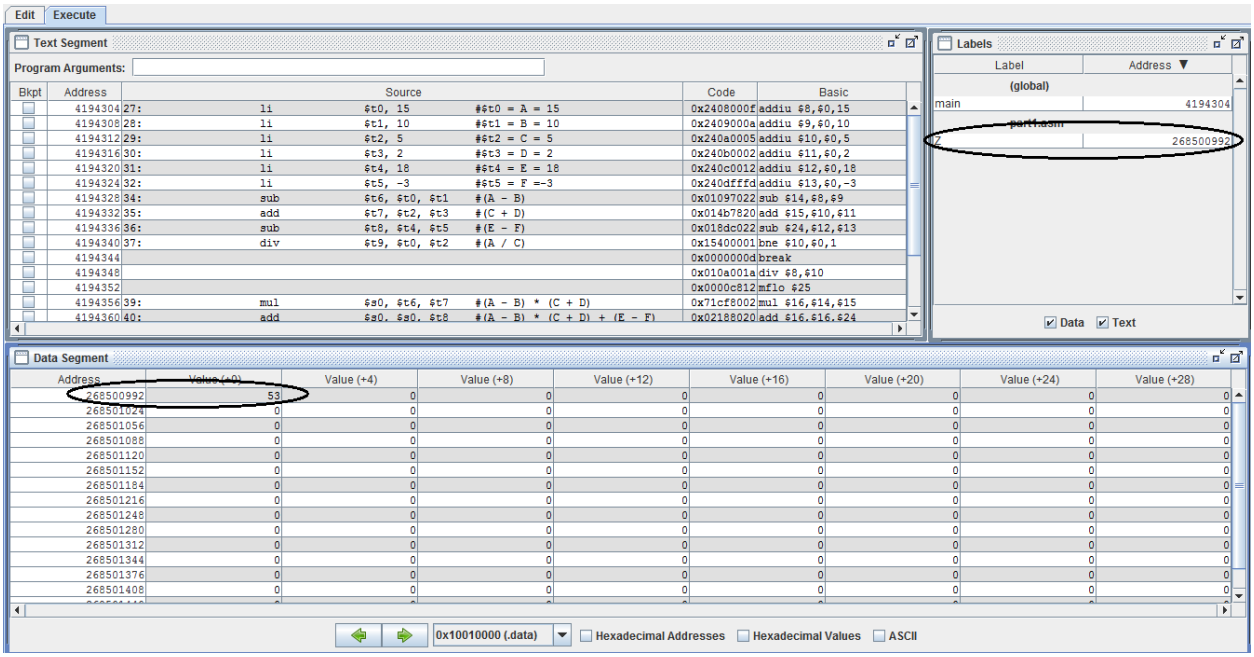
Name	Number	Value
$zero	0	0
$at	1	268500992
$v0	2	10
$v1	3	0
$a0	4	0
$a1	5	0
$a2	6	0
$a3	7	0
$t0	8	15
$t1	9	10
$t2	10	5
$t3	11	2
$t4	12	18
$t5	13	-3
$t6	14	5
$t7	15	7
$s0	16	53
$s1	17	0
$s2	18	0
$s3	19	0
$s4	20	0
$s5	21	0
$s6	22	0
$s7	23	0
$t8	24	21
$t9	25	3
$k0	26	0
$k1	27	0
$gp	28	268468224
$sp	29	2147479548
$fp	30	0
$ra	31	0
pc		4194384
hi		0
lo		35

Memory Panel

Before Program Execution



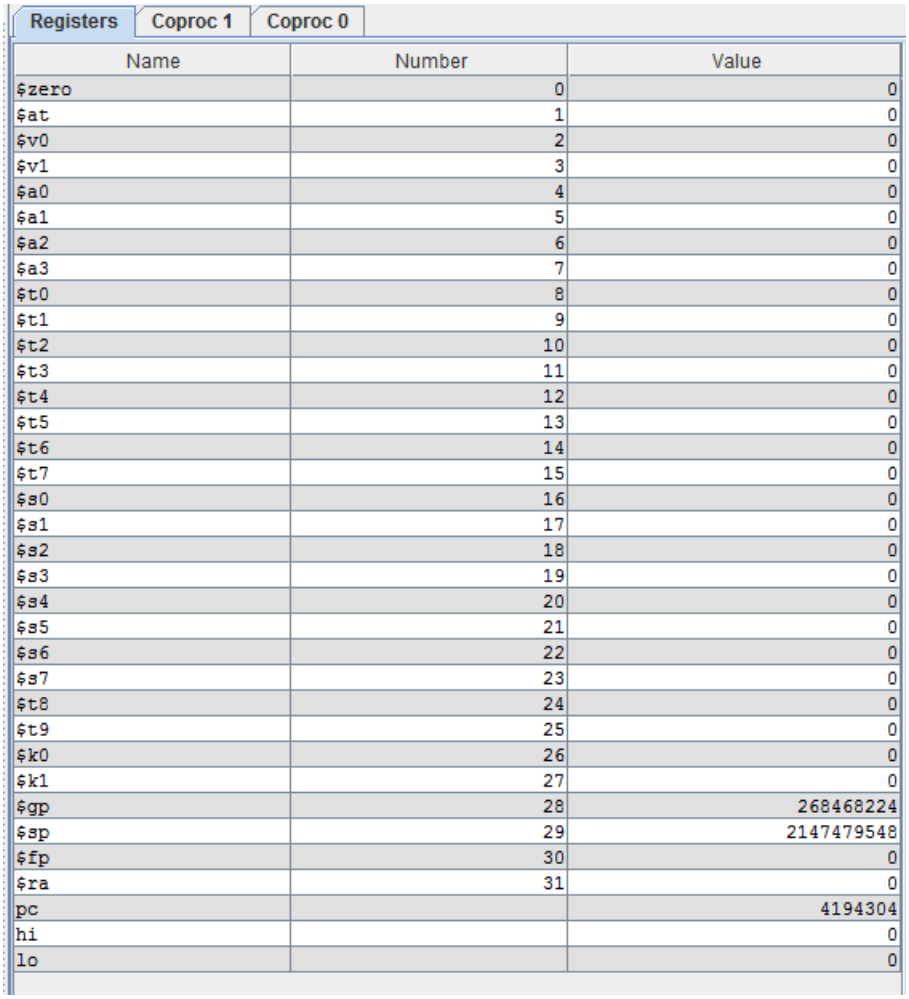
After Program Execution



Lab Part 2 – Branches

Register Panel

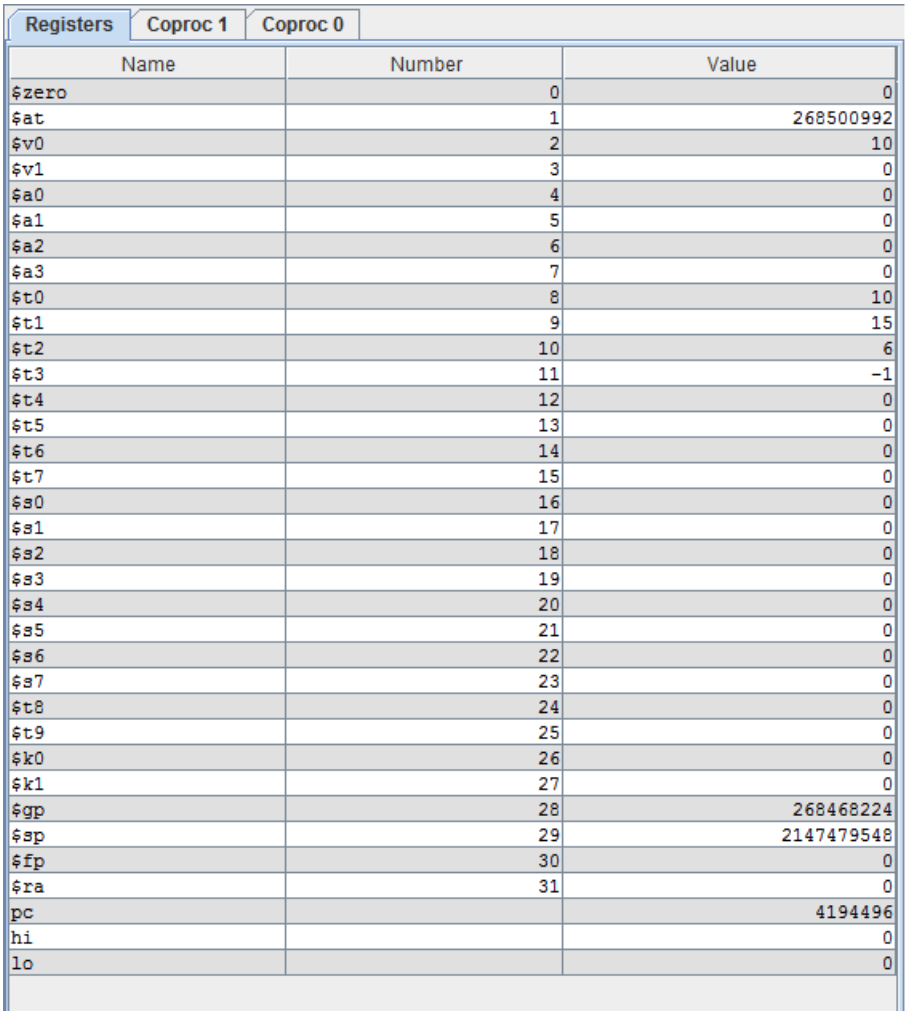
Before Program Execution



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
$t8	24	0
$t9	25	0
$k0	26	0
$k1	27	0
$gp	28	268468224
$sp	29	2147479548
$fp	30	0
$ra	31	0
pc		4194304
hi		0
lo		0

After Program Execution

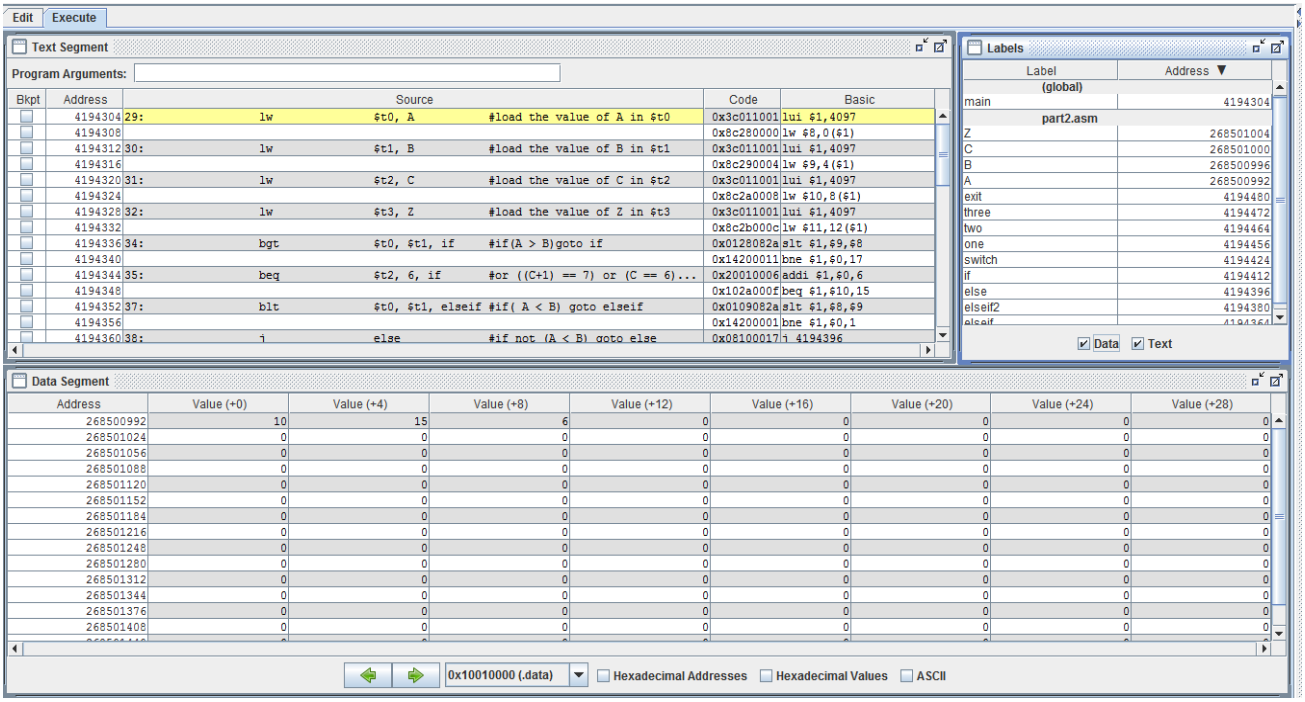


Registers | Coproc 1 | Coproc 0

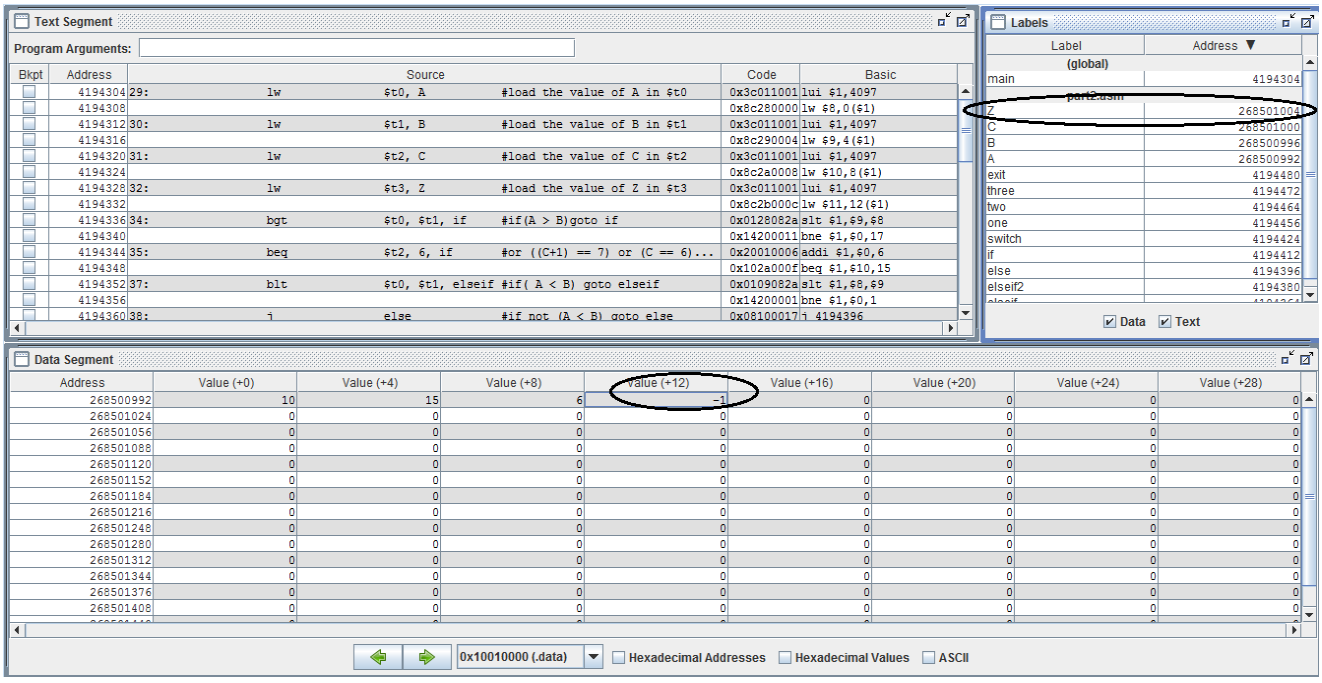
Name	Number	Value
$zero	0	0
$at	1	268500992
$v0	2	10
$v1	3	0
$a0	4	0
$a1	5	0
$a2	6	0
$a3	7	0
$t0	8	10
$t1	9	15
$t2	10	6
$t3	11	-1
$t4	12	0
$t5	13	0
$t6	14	0
$t7	15	0
$s0	16	0
$s1	17	0
$s2	18	0
$s3	19	0
$s4	20	0
$s5	21	0
$s6	22	0
$s7	23	0
$t8	24	0
$t9	25	0
$k0	26	0
$k1	27	0
$gp	28	268468224
$sp	29	2147479548
$fp	30	0
$ra	31	0
pc		4194496
hi		0
lo		0

Memory Panel

Before Program Execution



After Program Execution



Lab Part 3 – Loops

Register Panel

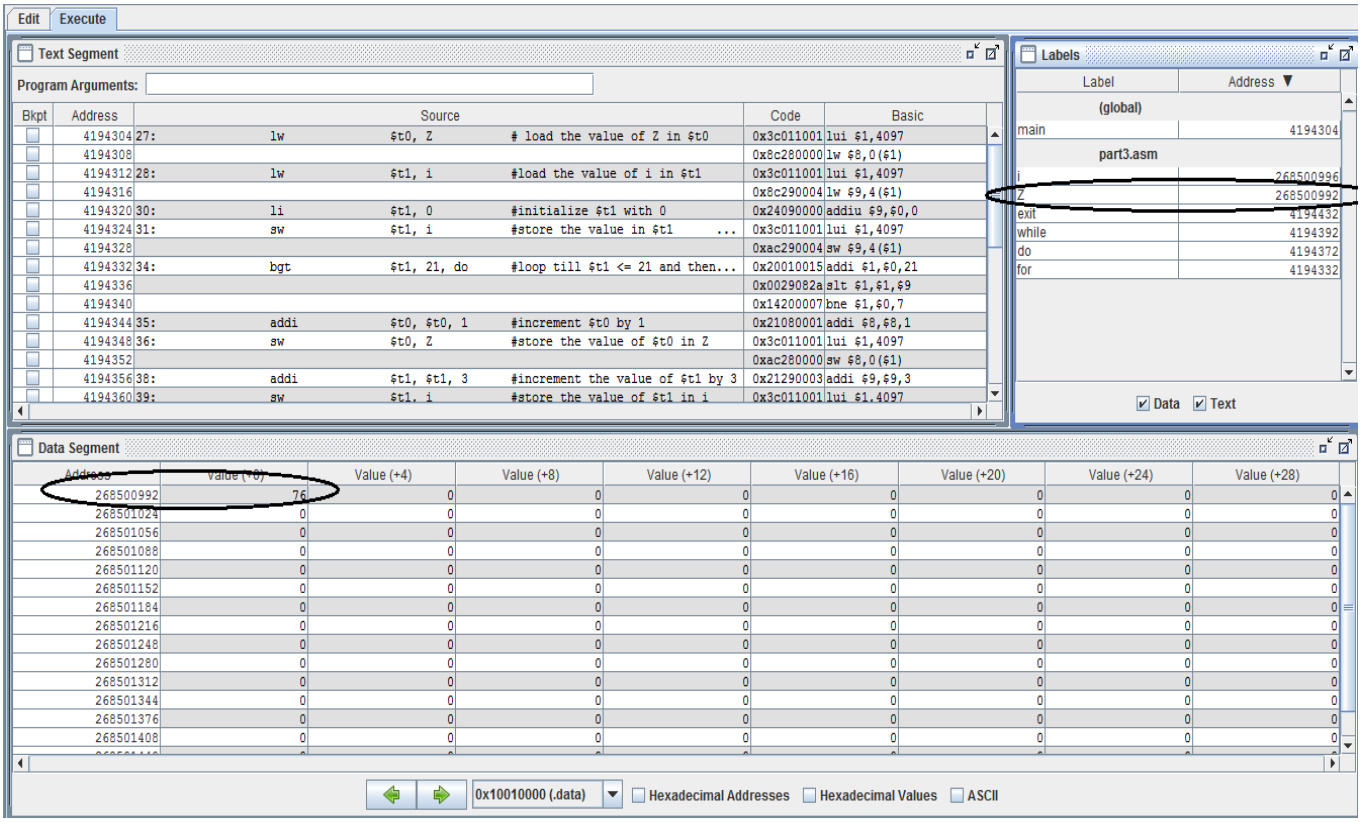
After Program Execution

Registers | Coproc 1 | Coproc 0

Name	Number	Value
$zero	0	0
$at	1	1
$v0	2	10
$v1	3	0
$a0	4	0
$a1	5	0
$a2	6	0
$a3	7	0
$t0	8	76
$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
$k0	26	0
$k1	27	0
$gp	28	268468224
$sp	29	2147479548
$fp	30	0
$ra	31	0
pc		4194440
hi		0
lo		0

Memory Panel

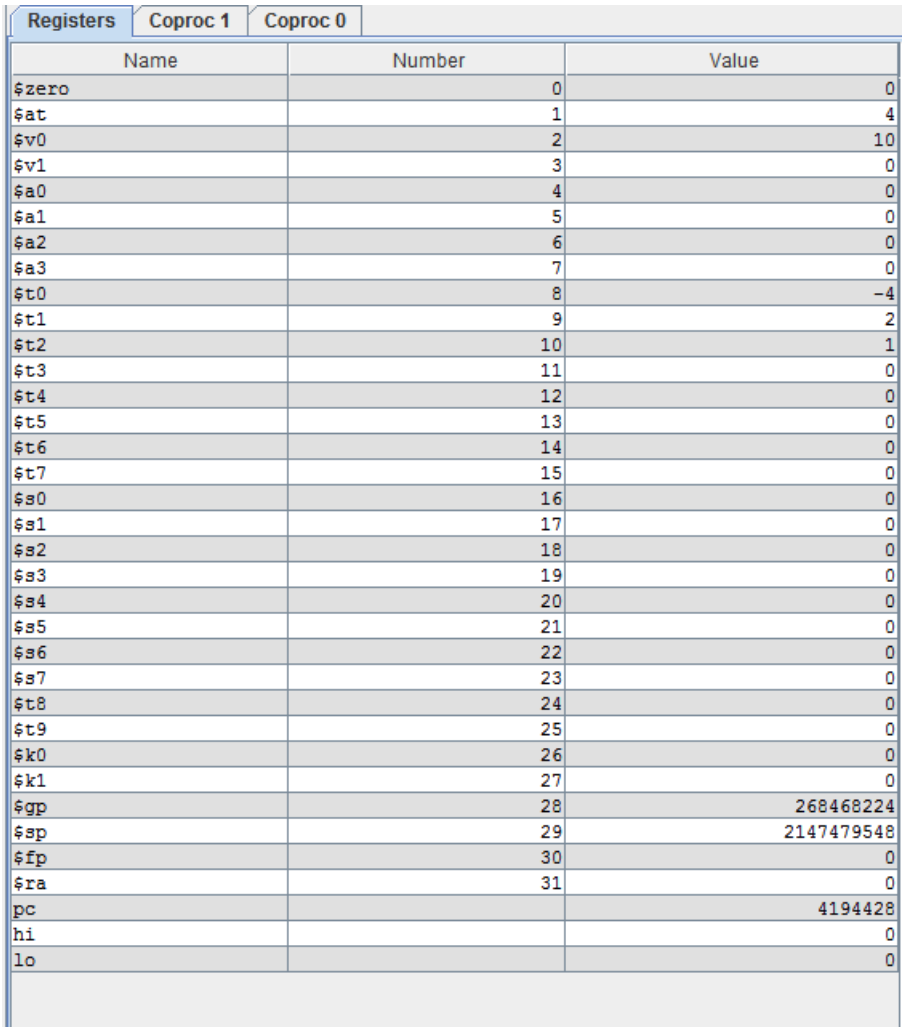
After Program Execution



Lab Part 4 – Arrays

Register Panel

After Program Execution

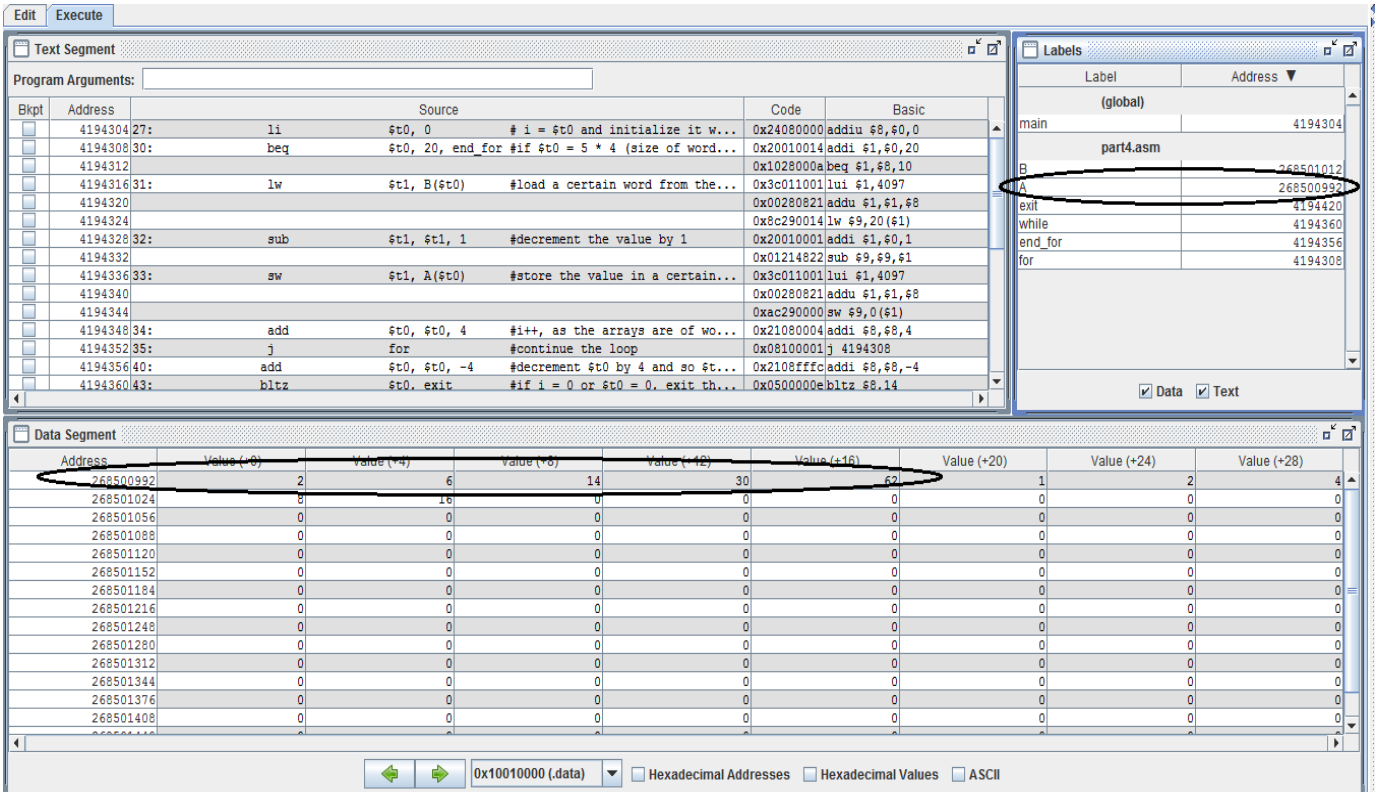


Registers | Coproc 1 | Coproc 0

Name	Number	Value
$zero	0	0
$at	1	4
$v0	2	10
$v1	3	0
$a0	4	0
$a1	5	0
$a2	6	0
$a3	7	0
$t0	8	-4
$t1	9	2
$t2	10	1
$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
$k0	26	0
$k1	27	0
$gp	28	268468224
$sp	29	2147479548
$fp	30	0
$ra	31	0
pc		4194428
hi		0
lo		0

Memory Panel

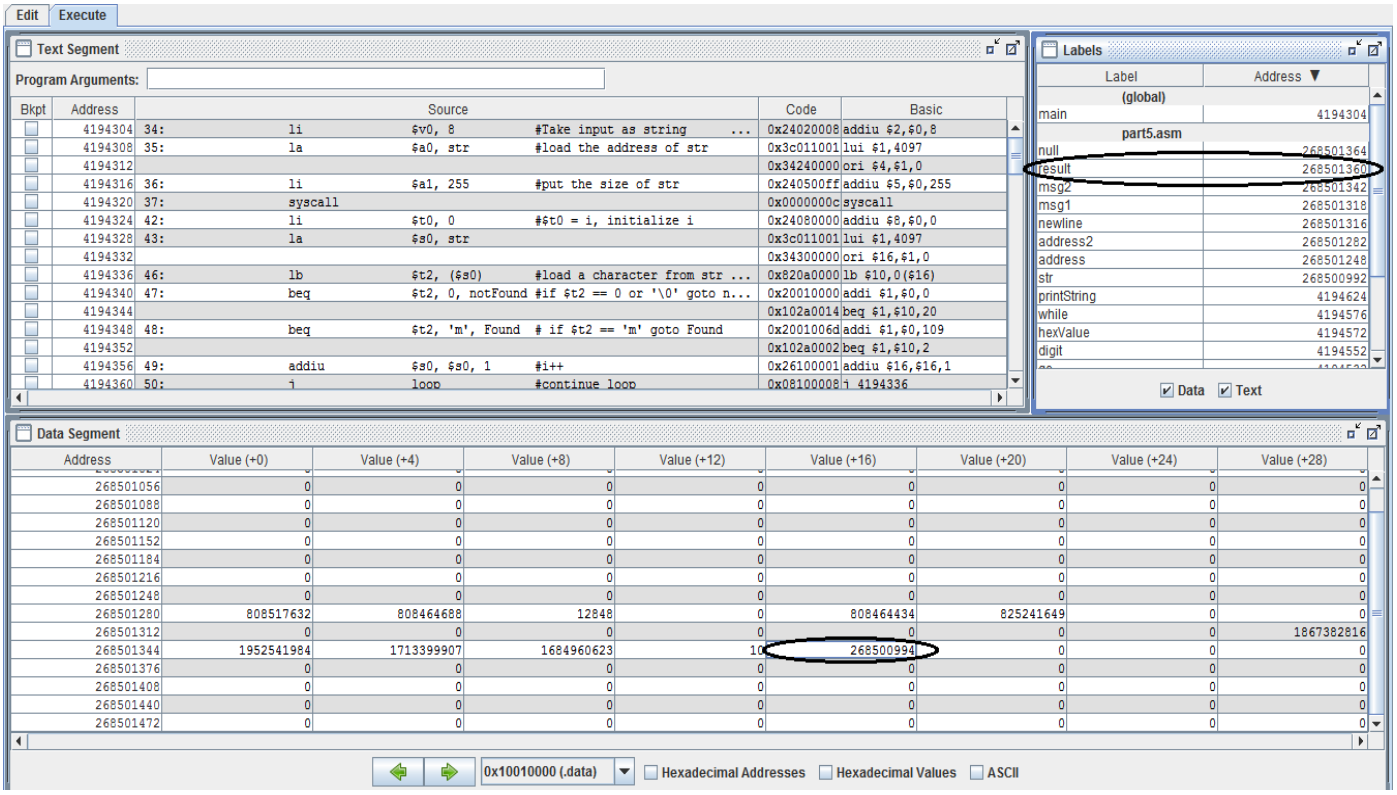
After Program Execution



Lab Part 5 – I/O, Loops and Arrays

Memory Panel

Address of result and its value (address of the character ‘m’)



Location of the character ‘m’