

C:\Users\pajos\Desktop\cs-2340\project2.asm - MARS 4.5

File Edit Run Settings Tools Help

Run speed at max (no interaction)

Text Segment

Bkpt	Address	Code	Basic	Source
	0x00400000	0x24020004	addiu \$2,\$0,4	17: li \$v0, 4 # service call: print str
	0x00400004	0x3c011001	lui \$1,4097	18: la \$a0, intMsg # load address of
	0x00400008	0x34240000	ori \$4,\$1,0	
	0x0040000c	0x0000000c	syscall	19: syscall # run system call
	0x00400010	0x24020005	addiu \$2,\$0,5	21: li \$v0, 5 # service call: read inte
	0x00400014	0x0000000c	syscall	22: syscall # run system call
	0x00400018	0x00028021	addiu \$16,\$0,\$2	23: move \$s0, \$v0 # \$s0 = \$v0
	0x0040001c	0x24020004	addiu \$2,\$0,4	25: li \$v0, 4 # service call: print str
	0x00400020	0x3c011001	lui \$1,4097	26: la \$a0, intMsg # load address of

Data Segment

Address	Value (+0)	Value (+4)	Value (+8)	Value (+c)	Value (+10)	Value (+14)	Value (+18)
0x10010000	170129221	1852776562	1852383333	1701274596	1919295602	840985967	5
0x10010020	544367988	543518319	1702129257	544367975	1836020326	892153888	15
0x10010040	540697970	1952058368	1394635365	980705999	1715535904	544367988	15
0x10010060	2112101	0	0	0	0	0	0
0x10010080	0	0	0	0	0	0	0
0x100100a0	0	0	0	0	0	0	0
0x100100c0	0	0	0	0	0	0	0

Registers

Name	Number	Value
\$zero	0	0
\$at	1	268500992
\$v0	2	10
\$v1	3	0
\$a0	4	32
\$a1	5	294
\$a2	6	0
\$a3	7	0
\$t0	8	15
\$t1	9	7
\$t2	10	0
\$t3	11	56
\$t4	12	268697656
\$t5	13	268697652
\$t6	14	268697656
\$t7	15	0
\$s0	16	15
\$s1	17	300
\$s2	18	0
\$s3	19	268697600
\$s4	20	0
\$s5	21	0
\$s6	22	0
\$s7	23	0
\$t8	24	0
\$t9	25	14
\$k0	26	0
\$k1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0

Mars Messages Run I/O

6:19 PM 9/18/2024

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Mars Messages

Enter one integer from 0-50: 11
Enter one integer from 0-50: 41
Before: 4 8 4 5 34 1 16 23 34 17 25
After Sort: 1 4 4 5 8 16 17 23 25 34 34
After Rearrange: 4 1 5 4 16 8 23 17 34 25 34
-- program is finished running --

Enter one integer from 2-50: 15
Enter one integer from 0-50: 300
Before: 255 228 79 47 167 188 251 132 87 195 119 195 122 282 294
After Sort: 47 79 87 119 122 132 167 188 195 195 228 251 255 282 294
After Rearrange: 79 47 119 87 132 122 188 167 195 195 251 228 282 255 294
-- program is finished running --

Registers

Name	Number	Value
\$zero	0	0
\$at	1	268500992
\$v0	2	10
\$v1	3	0
\$a0	4	32
\$a1	5	294
\$a2	6	0
\$a3	7	0
\$t0	8	15
\$t1	9	7
\$t2	10	0
\$t3	11	56
\$t4	12	268697656
\$t5	13	268697652
\$t6	14	268697656
\$t7	15	0
\$s0	16	15
\$s1	17	300
\$s2	18	0
\$s3	19	268697600
\$s4	20	0
\$s5	21	0
\$s6	22	0
\$s7	23	0
\$t8	24	0
\$t9	25	14
\$k0	26	0
\$k1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0

Clear

6:19 PM 9/18/2024

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File Edit Run Settings Tools Help

Run speed at max (no interaction)

Registers Coproc 1 Coproc 0

Name	Number	Value
\$zero	0	0
\$at	1	268500992
\$v0	2	10
\$v1	3	0
\$a0	4	32
\$a1	5	9
\$a2	6	0
\$a3	7	0
\$t0	8	5
\$t1	9	2
\$t2	10	0
\$t3	11	16
\$t4	12	268697616
\$t5	13	268697612
\$t6	14	268697616
\$t7	15	0
\$s0	16	5
\$s1	17	10
\$s2	18	0
\$s3	19	268697600
\$s4	20	0
\$s5	21	0
\$s6	22	0
\$s7	23	0
\$t8	24	0
\$t9	25	4
\$k0	26	0
\$k1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0

Text Segment

Bkpt	Address	Code	Basic	Source
	0x00400000	0x24020004	addiu \$2,\$0,4	17: li \$v0, 4 # service call: print string
	0x00400004	0x3c011001	lui \$1,4097	18: la \$a0, intMsg # load address of string to \$a0
	0x00400008	0x34240000	ori \$4,\$1,0	
	0x0040000c	0x0000000c	syscall	19: syscall # run system call
	0x00400010	0x24020005	addiu \$2,\$0,5	21: li \$v0, 5 # service call: read integer from keyboard t...
	0x00400014	0x0000000c	syscall	22: syscall # run system call
	0x00400018	0x00028021	addu \$16,\$0,\$2	23: move \$s0, \$v0 # \$s0 = \$v0
	0x0040001c	0x24020004	addiu \$2,\$0,4	25: li \$v0, 4 # service call: print string
	0x00400020	0x3c011001	lui \$1,4097	26: la \$a0, intMsg # load address of string to \$a0

Data Segment

Address	Value (+0)	Value (+4)	Value (+8)	Value (+c)	Value (+10)	Value (+14)	Value (+18)	Value (+1c)
0x10040000	2	1	8	3	5	0	0	0
0x10040020	0	0	0	0	0	0	0	0
0x10040040	0	0	0	0	0	0	0	0
0x10040060	0	0	0	0	0	0	0	0
0x10040080	0	0	0	0	0	0	0	0
0x100400a0	0	0	0	0	0	0	0	0
0x100400c0	0	0	0	0	0	0	0	0

Mars Messages Run I/O

Enter one integer from 0-50: 5
Enter one integer from 0-50: 10
Before: 9 3 1 2 8
After Sort: 1 2 3 8 9
After Rearrange: 2 1 8 3 9
-- program is finished running --

Clear

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Registers Coproc 1 Coproc 0

Name	Number	Value
\$zero	0	0
\$at	1	268500992
\$v0	2	10
\$v1	3	0
\$a0	4	32
\$a1	5	9
\$a2	6	0
\$a3	7	0
\$t0	8	5
\$t1	9	2
\$t2	10	0
\$t3	11	16
\$t4	12	268697616
\$t5	13	268697612
\$t6	14	268697616
\$t7	15	0
\$s0	16	5
\$s1	17	10
\$s2	18	0
\$s3	19	268697600
\$s4	20	0
\$s5	21	0
\$s6	22	0
\$s7	23	0
\$t8	24	0
\$t9	25	4
\$k0	26	0
\$k1	27	0
\$gp	28	268468224
\$sp	29	2147479548
\$fp	30	0
\$ra	31	0

Mars Messages Run I/O

Enter one integer from 0-50: 5
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Before: 9 3 1 2 8
After Sort: 1 2 3 8 9
After Rearrange: 2 1 8 3 9
-- program is finished running --

Clear