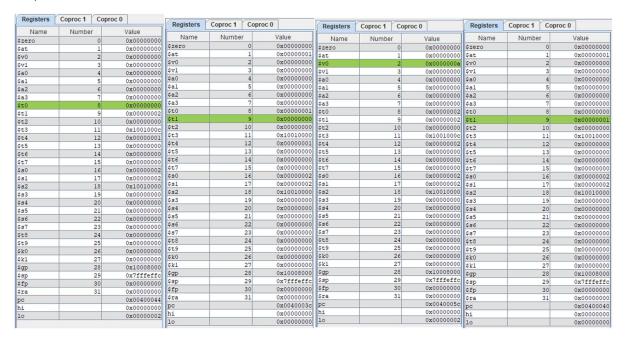
1.c)



1.d) To implement the code in 1.c (initialize the variables a and b to 2 and 2, respectively) took a total of 2 pseudoinstructions or 4 instructions.

2.b)

First function call, creation of space on the stack, and saving of \$ra, \$s0, \$s1

Name Number Val 5zero 0 0 6at 1 1 5v0 2 0 6v1 3 3 5a0 4 6 6a1 5 6 6a2 6 6 6a3 7 6 5t0 8 6 6t1 9 6 6t2 10 6 6t3 11 6 6t4 12 12 6t5 13 6 6t6 14 6 6t7 15 6 6a0 16 6	ue 0x00000000
\$41	0.000000000
\$90	
6VI 3 5a0 4 6a1 5 6a2 6 6a3 7 5c0 8 5c1 9 5c2 10 6c3 11 5c4 12 5c5 13 6c6 14 5c7 15 5c90 16	0x00000000
\$a0	0x00000000
\$a1 5 5 6a2 6 6 9a3 77 550 8 550 9 16 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0x00000000
\$a2 6 \$a3 7 \$c0 8 \$c0 8 \$c1 9 \$c2 10 \$c2 10 \$c3 11 \$c4 12 \$c5 13 \$c6 14 \$c7 15 \$c9 16	0x00000003
643 7 650 8 650 9 651 9 652 10 653 11 654 12 655 13 656 14 657 15 659 16	0x00000000
\$t0 8 5t1 9 5t2 10 5t2 10 5t2 10 5t3 11 5t4 12 5t5 13 5t6 14 5t7 15 5t9 0 16	0x00000000
6t1 9 5t2 10 5t3 11 5t4 12 5t5 13 5t6 14 5t7 15 6s0 16	0x00000000
\$t2 10 5t3 11 5t4 12 5t5 13 5t6 14 12 5t5 13 5t6 14 5t7 15 5t9 16	0x00000000
6t3 11 6t4 12 6t5 13 6t6 14 6t7 15 6s0 16	0x00000000
\$t4 12 \$t5 13 \$t6 14 \$t7 15 \$s0 16	0x00000000
\$t5 13 \$t6 14 \$t7 15 \$s0 16	0x00000000
\$16 14 \$17 15 \$80 16	0x00000000
\$t7 15 \$s0 16	0x00000000
\$80 16	0x00000000
	0x00000000
	0x00000000
\$31	0x00000000
\$s2 18	0x00000000
\$83 19	0x00000000
\$84 20	0x00000000
\$85 21	0x00000000
\$86 22	0x00000000
\$87 23	0x00000000
St8 24	0x00000000
\$t9 25	0x00000000
\$k0 26	0x00000000
\$k1 27	0x00000000
\$gp 28	0x10008000
\$sp 29	0x7fffeff0
\$fp 30	0x00000000
\$ra 31	0x00400008
pc	0x00400024
hi	0x00000000
10	0x00000000

fib(n-1) call

Name	Number	Value
Szero	Number 0	0x00000000
Şat	1	0x00000000
Sv0	2	0x00000000
\$v1	3	0x0000000
\$a0	4	0x00000000
Şal	5	0x00000000
\$a2	6	0x00000000
\$a2 \$a3	7	0x00000000
\$t0	8	0x00000000
	9	
\$t1 \$t2	10	0x00000000
\$t3	11	0x00000000
\$t4 \$t5	12	0x00000000
		0x0000000
\$t6	14	0x0000000
\$t7	15	0x0000000
\$80	16	0x00000000
\$81	17	0x0000000
\$82	18	0x0000000
\$83	19	0x0000000
\$84	20	0x0000000
\$85	21	0x0000000
\$86	22	0x0000000
\$87	23	0x0000000
\$t8	24	0x0000000
\$t9	25	0x0000000
\$k0	26	0x0000000
\$kl	27	0x0000000
\$gp	28	0x10008000
\$sp	29	0x7fffeff
\$fp	30	0x0000000
Şra	31	0x0040004
pc		0x0040001
hi		0x0000000
10		0x0000000

second fib(n-1) call

Registers Copro	oc 1 Coproc 0	
Name	Number	Value
\$zero	0	0x00000000
\$at	1	0x00000001
\$v0	2	0x00000000
\$vl	3	0x00000000
\$a0	4	0x00000001
\$al	5	0x00000000
\$a2	6	0x00000000
\$a3	7	0x00000000
\$t0	8	0x00000000
\$t1	9	0x00000000
\$t2	10	0x00000000
\$t3	11	0x00000000
\$t4	12	0x00000000
\$t5	13	0x00000000
\$t6	14	0x00000000
\$t7	15	0x00000000
\$80	16	0x00000002
\$sl	17	0x00000000
\$82	18	0x00000000
\$83	19	0x00000000
\$84	20	0x00000000
\$85	21	0x00000000
\$86	22	0x00000000
\$87	23	0x00000000
\$t8	24	0x00000000
\$t9	25	0x00000000
\$k0	26	0x00000000
\$kl	27	0x00000000
\$gp	28	0x10008000
\$sp	29	0x7fffefe4
\$fp	30	0x00000000
\$ra	31	0x00400044
рс		0x00400040
hi		0x00000000
10		0x00000000

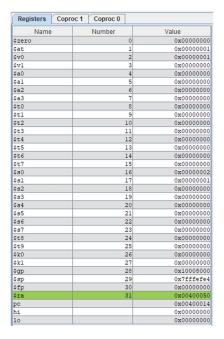
first return

Registers	Coproc 1 Coproc ()	
Name	Number	Value	
\$zero		0 0x0000	00000
\$at		1 0x0000	0000
\$v0		2 0x0000	0000
\$vl		3 0x0000	00000
\$a0		4 0x0000	0000
\$al		5 0x0000	00000
\$a2		6 0x0000	0000
\$a3		7 0x0000	0000
\$t0		8 0x0000	0000
\$tl		9 0x0000	0000
\$t2		10 0x0000	0000
\$t3		11 0x0000	0000
\$t4		12 0x0000	0000
\$t5		13 0x0000	0000
\$t6		14 0x0000	0000
\$t7		15 0x0000	0000
\$80		16 0x0000	0000
\$s1		17 0x0000	0000
\$82		18 0x0000	0000
\$83		19 0x0000	0000
\$84		20 0x0000	0000
\$85		21 0x0000	0000
\$86		22 0x0000	0000
\$87		23 0x0000	0000
\$t8		24 0x0000	0000
\$t9		25 0x0000	0000
\$k0		26 0x0000	0000
\$kl		27 0x0000	00000
\$gp		28 0x1000	08000
\$sp		29 0x7ff:	fefe
\$fp		30 0x0000	00000
Şra		31 0x0040	00044
рс		0x004	0004
hi		0x0000	0000
10		0x0000	00000

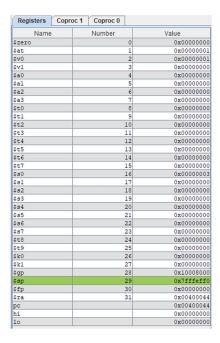
first fib(n-2) call

Registers	Coproc 1	Coproc 0	
Name	9	Number	Value
\$zero		0	0x00000000
\$at		1	0x00000001
\$v0		2	0x00000000
\$vl		3	0x00000000
\$a0		4	0x00000000
Şal		5	0x00000000
\$a2		6	0x00000000
\$a3		7	0x00000000
\$t0		8	0x00000000
\$t1		9	0x00000000
\$t2		10	0x00000000
\$t3		11	0x00000000
\$t4		12	0x00000000
\$t5		13	0x00000000
\$t6		14	0x00000000
\$t7		15	0x00000000
\$80		16	0x00000002
\$sl		17	0x00000001
\$82		18	0x00000000
\$83		19	0x00000000
\$84		20	0x00000000
\$85		21	0x00000000
\$86		22	0x00000000
\$87		23	0x00000000
\$t8		24	0x00000000
\$t9		25	0x00000000
\$k0		26	0x00000000
\$kl		27	0x00000000
\$gp		28	0x10008000
\$sp		29	0x7fffefe4
\$fp		30	0x00000000
Şra		31	0x00400050
pc			0x00400050
hi			0x00000000
10			0x00000000

Screenshot-6: second return



Screenshot-7: third return



Screenshot-8: second fib(n-2) call

Name	Number	Value
\$zero	0	0x00000000
Şat	1	0x00000001
\$v0	2	0x00000001
\$vl	3	0x00000000
\$a0	4	0x00000000
\$al	5	0x00000000
\$a2	6	0x00000000
\$a3	7	0x00000000
\$t0	8	0x00000000
\$t1	9	0x00000000
\$t2	10	0x00000000
\$t3	11	0x00000000
\$t4	12	0x00000000
\$t5	13	0x0000000
\$t6	14	0x0000000
\$t7	15	0x0000000
\$80	16	0x0000000
\$s1	17	0x0000000
\$82	18	0x0000000
\$83	19	0x00000000
\$84	20	0x0000000
\$85	21	0x00000000
\$86	22	0x0000000
\$87	23	0x00000000
\$t8	24	0x0000000
\$t9	25	0x00000000
\$k0	26	0x0000000
şkl	27	0x00000000
\$gp	28	0x10008000
\$sp	29	0x7fffeff
\$fp	30	0x0000000
\$ra	31	0x00400050
pc		0x00400014
hi		0x00000000
10		0x00000000

Screenshot-9: forth return

Name	Number	Value
\$zero	0	0x00000000
\$at	1	0x00000000
\$v0	2	0x00000000
\$vl	3	0x00000000
\$a0	4	0x00000000
\$al	5	0x00000000
\$a2	6	0x00000000
\$a3	7	0x00000000
\$t0	8	0x00000000
\$t1	9	0x00000000
\$t2	10	0x00000000
\$t3	11	0x00000000
\$t4	12	0x00000000
\$t5	13	0x00000000
\$t6	14	0x00000000
\$t7	15	0x00000000
\$80	16	0x00000000
\$sl	17	0x00000000
\$82	18	0x00000000
\$83	19	0x00000000
\$84	20	0x00000000
\$85	21	0x00000000
\$86	22	0x00000000
\$87	23	0x00000000
\$t8	24	0x00000000
\$t9	25	0x00000000
\$k0	26	0x00000000
\$kl	27	0x00000000
\$gp	28	0x1000800
\$sp	29	0x7fffeff
\$fp	30	0x00000000
\$ra	31	0x0040005
рс		0x0040005
hi		0x00000000
10		0x0000000

Screenshot-10: before program exit

Registers	Coproc 1	Coproc 0		
Name		Number		Value
\$zero			0	0x00000000
\$at			1	0x00000001
\$v0			2	0x0000000a
\$v1			3	0x000000000
\$a0			4	0x00000001
\$al			5	0x00000002
\$a2			6	0x00000000
\$a3			7	0x00000000
\$t0			8	0x00000000
\$t1			9	0x00000000
\$t2		1	10	0x00000000
\$t3		1	11	0x00000000
\$t4			12	0x00000000
\$t5		1	13	0x00000000
\$t6		1	14	0x00000000
\$t7		1	15	0x00000000
\$80		1	16	0x00000000
\$81			17	0x00000000
\$82			18	0x00000000
\$83			19	0x00000000
\$84			20	0x00000000
\$85			21	0x00000000
\$86			22	0x00000000
\$87			23	0x00000000
\$t8			24	0x00000000
\$t9			25	0x00000000
\$k0			26	0x00000000
\$kl			27	0x00000000
\$gp			28	0x10008000
\$sp			29	0x7fffeffc
\$fp			30	0x00000000
Şra			31	0x00400008
pc				0x00400010
hi				0x00000000
10				0x00000000