Princeton University
COS 217: Introduction to Programming Systems
Assembler Output for artificial.S

Symbol Table

Label	Section	Offset	Local/Global	Sequence #
a	data	12	local	0
mylabel	text	40	local	1
printf	text	?	global	2

Data Section

Offset	Contents (binary)	Contents (hex)	Explanation
0	01100001	61	.ascii "abc"
1	01100010	62	
2	01100011	63	
3	00000000	00	.skip 4
4	00000000	00	
5	00000000	00	
6	00000000	00	
7	01100010	62	.asciz "b"
8	00000000	00	
9	00000100	04	.byte 4
10	00000000	00	.align 4
11	00000000	00	
12	00000000	00	.word 4
13	00000000	00	
14	00000000	00	
15	00000100	04	

Text Section

Offset	Contents (binary)	Contents (hex)	Explanation
0-3	10 00011 000000 00001 0 00000000 00010	86004002	add %r1, %r2, %r3
4-7	10 00011 000100 00001 0 00000000 00010	86204002	sub %r1, %r2, %r3
8-11	10 00011 000000 00001 1 0000000000100	86006004	add %r1, 4, %r3
12-15	10 00011 000000 00001 1 0000000001000	86006008	add %r1, 4 + 4, %r3
16-19	00 00011 100 ????????????????????	07000000	sethi %hi(a), %r3
20-23	00 0 1010 010 00000000000000000101	14800005	bg mylabel
24-27	01 00000000000000000000000000000100	40000004	call mylabel
28-31	01 ??????????????????????????????	40000000	call printf
32-35	11 00011 000000 00001 0 00000000 00010	C6004002	ld [%r1 + %r2], %r3
36-39	11 00011 000000 00001 1 0000000000100	C6006004	ld [%r1 + 4], %r3
40-43	11 00011 000000 00001 0 00000000 00000	C6004000	ld [%r1], %r3

Relocation Records

Offset	Relocation Type	Label Sequence #
16	R_SPARC_HI22	0
28	R_SPARC_WDISP30	2