

Princeton University  
 COS 217: Introduction to Programming Systems  
 Assembler Output for 09relocation.s

**Symbol Table:**

Label	Section	Offset	Local/Global	Sequence #
start	text	0	local	0
label	data	0	local	1

**Data Section:**

(Empty)

**Text Section:**

Offset	Contents	Generated By	Explanation
0-3	10 80 00 00	ba label	00 0 1000 010 ?????????????????????? op a cond disp22
4-7	01 00 00 00	nop	00 00000 100 000000000000000000000000 op rd imm22
8-11	10 bf ff fe	ba start	00 0 1000 010 111111111111111111111110 op a cond disp22 (-3)
12-15	01 00 00 00	nop	00 00000 100 000000000000000000000000 op rd imm22
16-19	40 00 00 00	call label	01 ?????????????????????????????????? op disp30
20-23	01 00 00 00	nop	00 00000 100 000000000000000000000000 op rd imm22
24-27	7f ff ff fa	call start	01 1111111111111111111111111111010 op disp30 (-6)
28-31	01 00 00 00	nop	00 00000 100 000000000000000000000000 op rd imm22
32-35	07 00 00 00	sethi %hi(start),%r3	00 00011 100 ?????????????????????? op rd imm22
36-39	86 10 e0 00	or %r3,%lo(start),%r3	10 00011 000010 00011 1 ?????????????? op rd op3 rs1 i simm13

**Relocation Entries for Data Section:**

(None)

**Relocation Entries for Text Section:**

Offset	Relocation Type	Label Sequence #	Addend
0	R SPARC WDISP22	1 (label)	0
16	R SPARC WDISP30	1 (label)	0
32	R SPARC HI22	0 (start)	0
36	R SPARC LO10	0 (start)	0