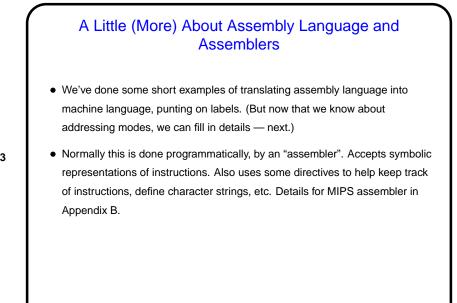
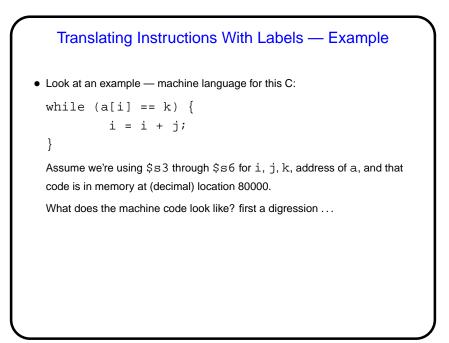


Minute Essay From Last Lecture
Answer in notes — now anyway.
Many people came fairly close. Review tracing through code?
Off-topic for this slide but interesting: An attempt to Google up an answer to the question "why two registers for procedure return values?" found a Stack Overflow post saying it was so one could return 64-bit values. Sounds plausible to me!

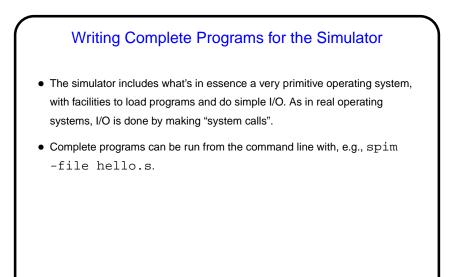
Slide 2



```
Slide 3
```



Slide 4

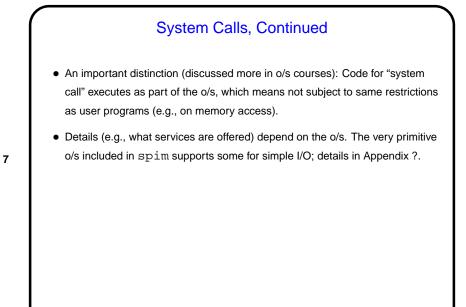


Slide 5

System Calls System calls are how user programs request service from the operating system — not just in MIPS, but in general. In MIPS the instruction is syscall; other architectures have something analogous. System calls similar to procedure calls in some ways — need to communicate to o/s which service you want (e.g., write some text to "standard output") and possibly parameters (e.g., the text to write). As with procedure calls, we do this by putting values in particular registers, but then rather than jal we use

Slide 6

syscall.



Slide 7

