**SPIM simulator**

CSE 410, Spring 2007
Computer Systems

http://www.cs.washington.edu/410

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**Reading and References**

- See the Resources section on the SPIM web page for documentation on SPIM
  » http://www.cs.wisc.edu/~larus/spim.html

- In particular, Appendix A (from the textbook) and Getting Started with PCSpim are useful reading from that site

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**Spim display**

- Register panel
  » register names and numbers
- Text segment panel
  » note jump and link to “main” at [0x00400014]
  » your code defines the label “main”
- Data and Stack segment panel
- Message panel

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**SPIM simulator**

- SPIM lets you write MIPS assembly language code and run it on a PC
- PCSpim is installed on the machines in the Math Sciences Computing Center
- You can download versions for Windows and all varieties of *nix (including MacOS X) from the web site
  » http://www.cs.wisc.edu/~larus/spim.html
Context editor

- You can use any text editor you like to write the source code
  - see links on class software page
- Context editor provided in MSCC
  - it has a highlighter for MIPS assembly language
  - it doesn’t try to be a word processor
- jEdit also provides a MIPS highlighter
- emacs can do anything including asm – but has a huge learning curve

```assembly
hello.s

.data
str:
.asciiz "Hello World\n"

.text
main:
li $v0,4    # print_string code
la $a0,str  # addr(str)
syscall    # print it
jr $ra      # return
```