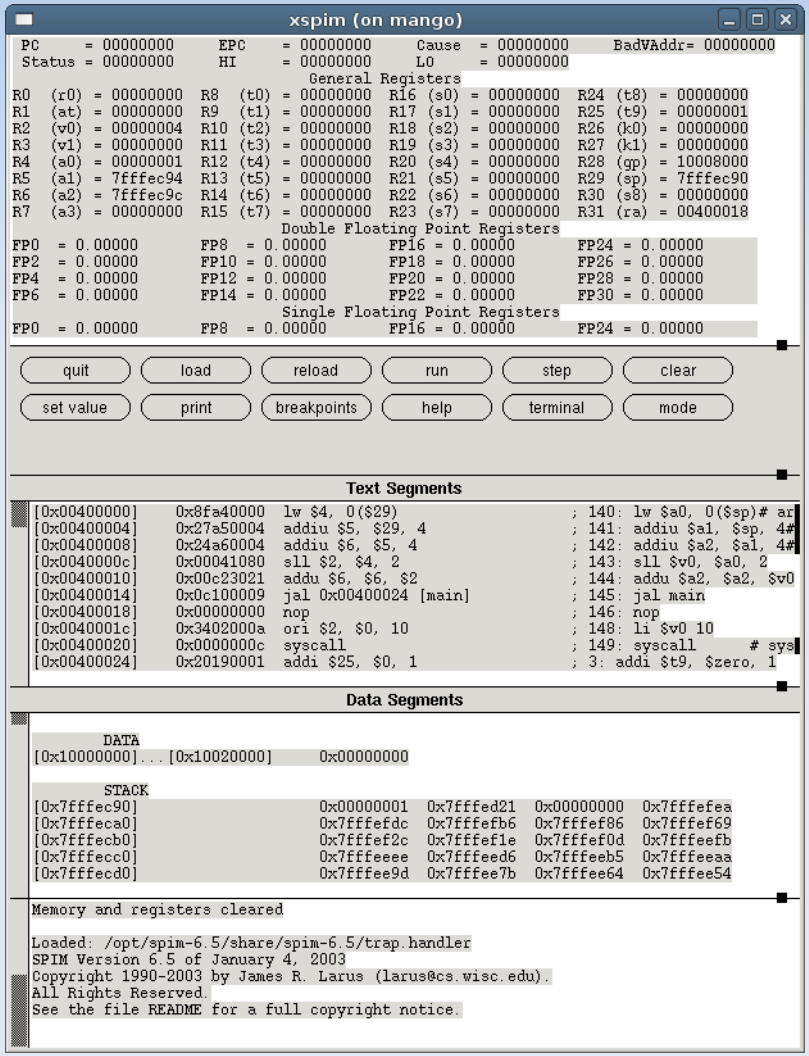
Using XSpim

What is XSpim?

- It's a GUI version of the Spim simulator for MIPS
- Free and available for Win, Mac and Linux/Unix



Accessing XSpim

- XSpim is available for use on the CUNIX system with the command `xspim`
  - Need to use Xwindows when connecting
  - See http://www.columbia.edu/~lgw23/cs1004/ for info on connecting to CUNIX and using Xwindows
- Can download to your own system but grading will be done on CUNIX

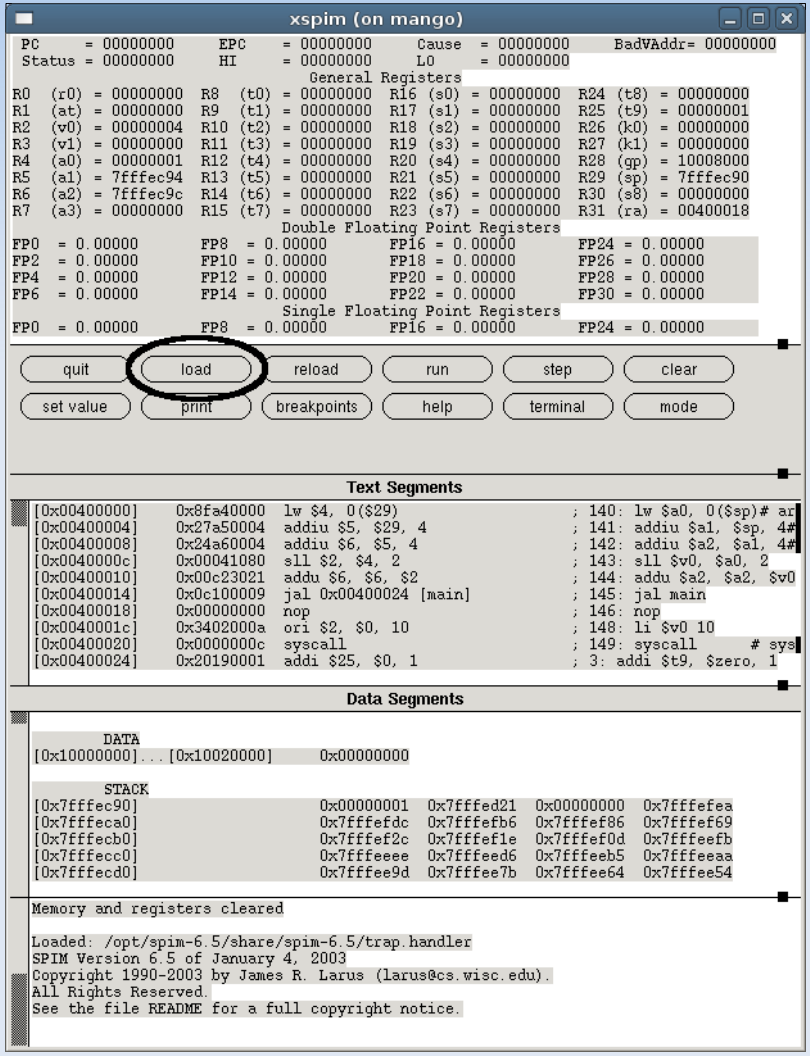
Creating a File

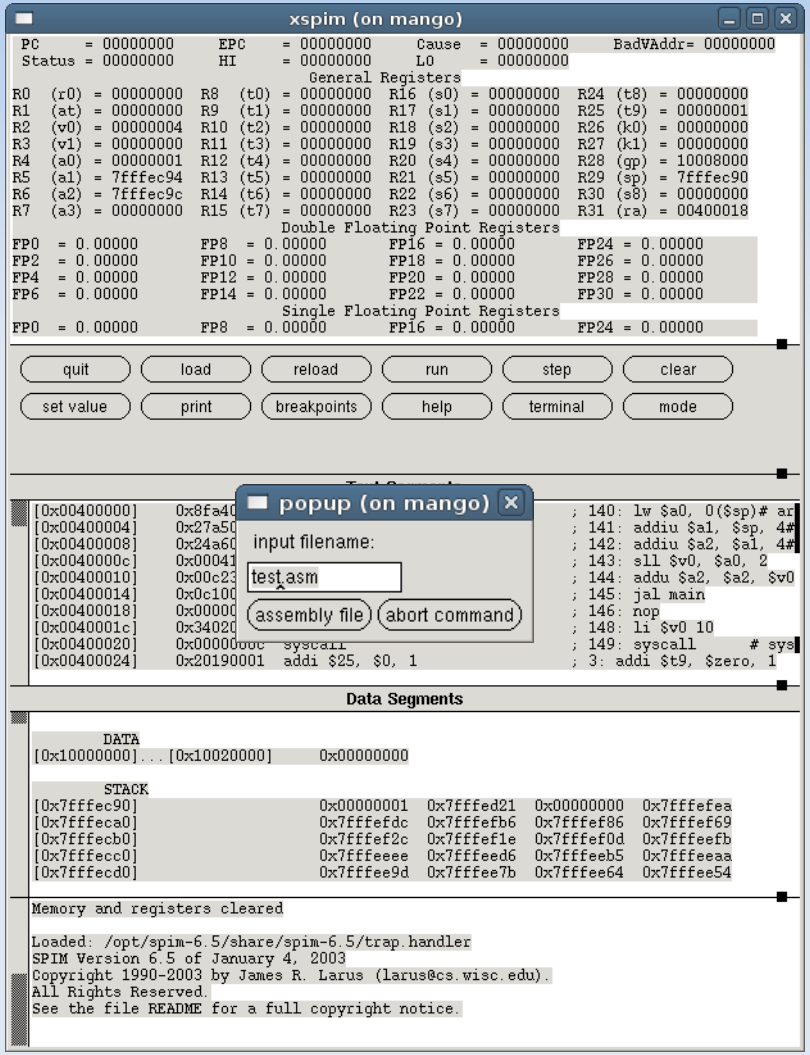
- Before running XSpim you need to create an assembly file
- File should be plain text, typically with .asm extension

Example Program:

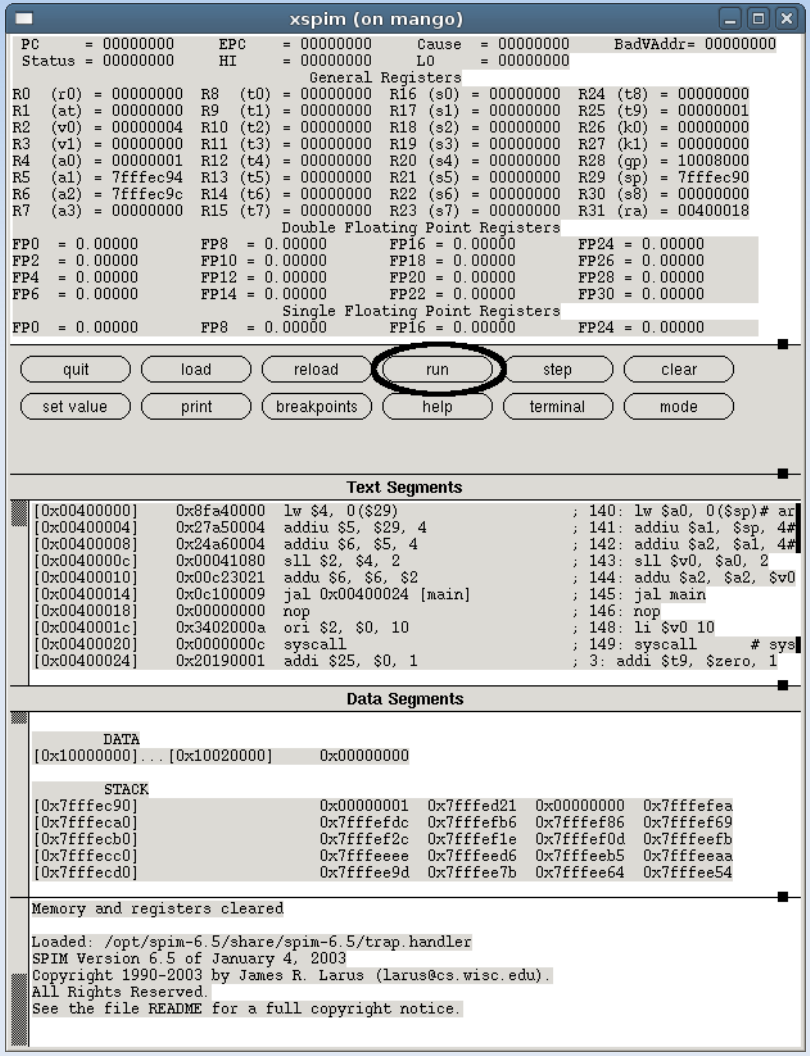
```
   .text  # signals start of code

main:  # signals start of program

   addi $t9, $zero, 1
   beq $t0, $zero, end

loop:

   and $t2, $t0, $t9
   sll $t9, $t9, 1
   beq $t2, $zero, loop
   add $t0, $t2, $zero

end:
```

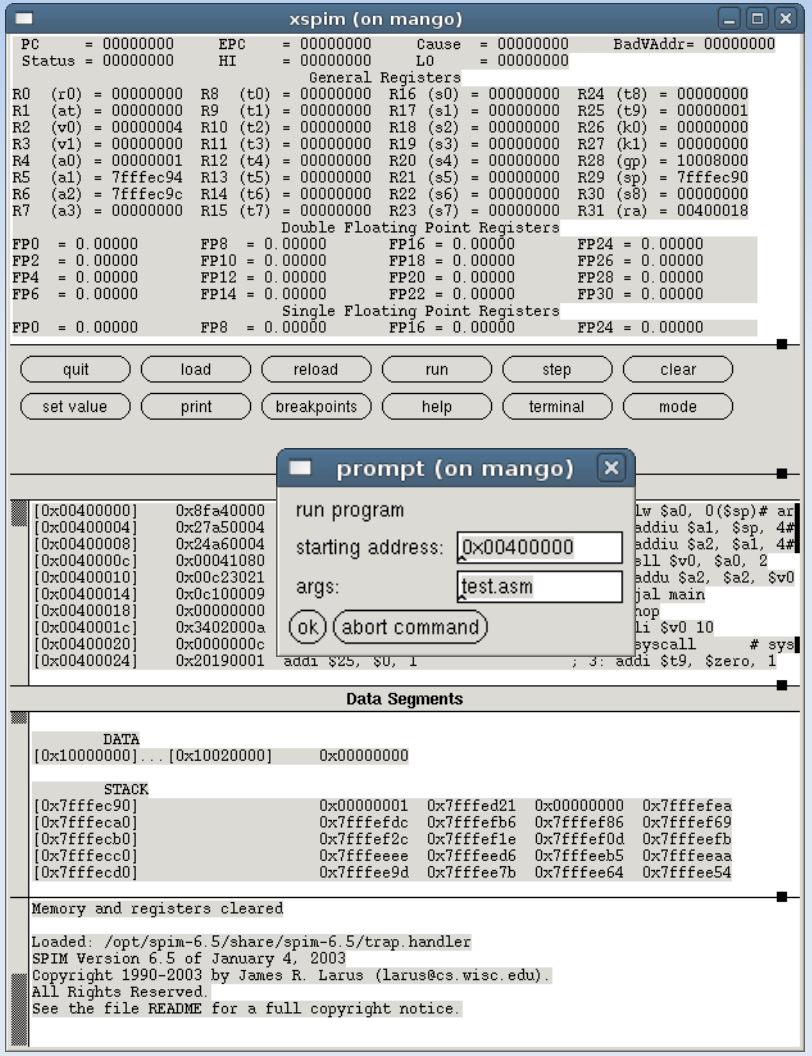
Loading File





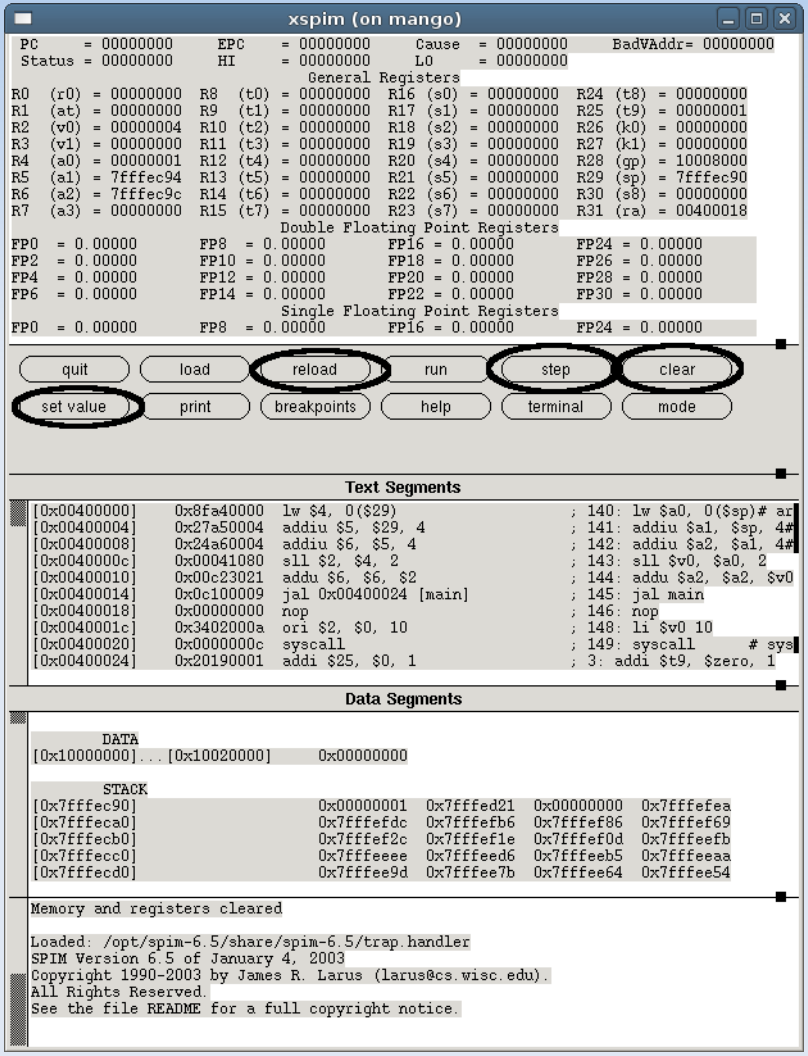
Running Program





Other Useful Buttons

- Set value – set the value of a register
- Step – step through the code, line by line
- Clear – reset registers back to zero
- Reload – reload last assembly program



Additional Tips

- Avoid clicking the 'x' button on windows to close them as this will crash XSpim
  - Use 'abort command' buttons instead
- When typing data into a field, make sure your mouse cursor is over the field
  - Moving away will require you to select the field again
- A comprehensive discussion of MIPS and XSPIM can be found in the Appendix of P&H