

# CS 315-02 RISC-V Emulation 1

Lab 03 due Tue Oct 1 11:59 pm

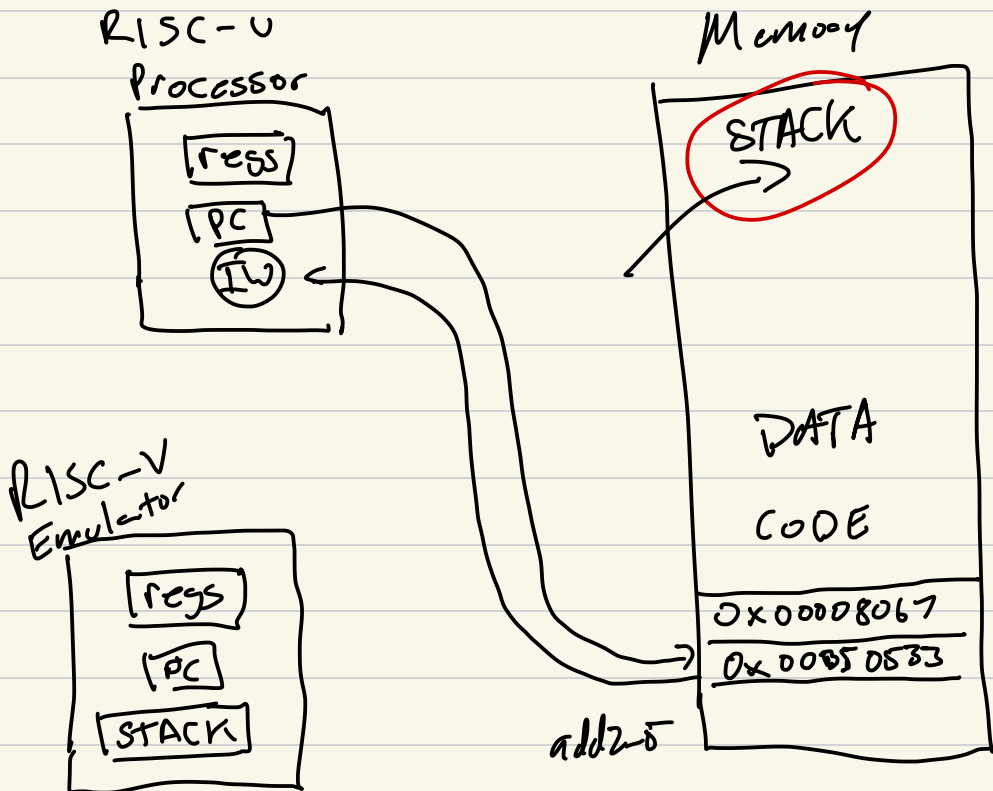
Lab 03 Exam Problems

due Thu Oct 3 11:59 pm

Project 09 due Tue Oct 8 11:59 pm

Project 09 IG Wed Oct 9

Midterm Thu Oct 10



# Processor State

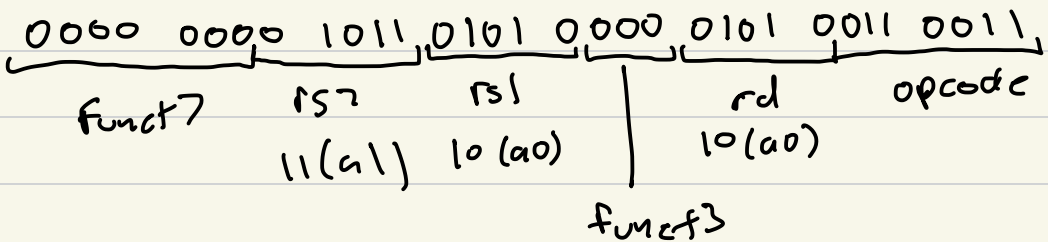
Registers (32)

PC program counter

Memory (Stack)

rd rsl rsz  
add a0, a0, a1

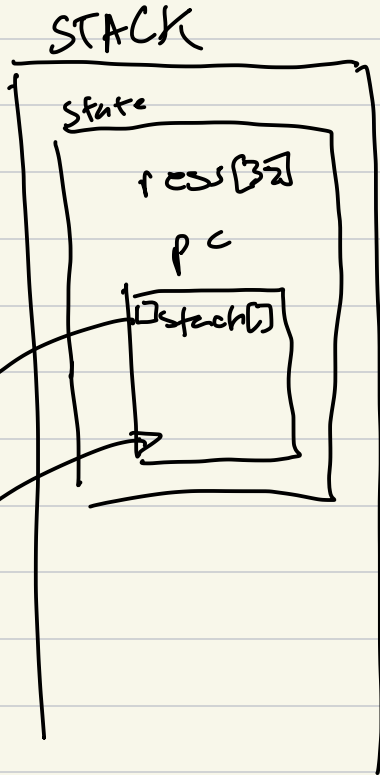
iw = 0x00b50533



# Emulated Stack

main() {

struct ru\_state state;



get\_bits ( v ,  $\frac{start}{7}$  ,  $\frac{count}{5}$  )

$rd = (iw \gg \underline{7}) \& \underline{0611111}$

$rd = (iw \gg start) \& \text{mask}$

$$\begin{array}{r}
 06011111 \\
 + \quad \quad 1 \\
 \hline
 06100000 \\
 \underbrace{\quad\quad\quad} \\
 1 \ll 5
 \end{array}$$

$$\text{mask} = (1 \ll \text{count}) - 1$$


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Branch B-tyP

