

Computation Steps

		call Dest	
Fetch	icode,ifun	$\text{icode:ifun} \leftarrow M_1[\text{PC}]$ $\text{valC} \leftarrow M_4[\text{PC}+1]$ $\text{valP} \leftarrow \text{PC}+5$	Read instruction byte
	rA,rB		[Read register byte]
	valC		Read constant word
	valP		Compute next PC
Decode	valA, srcA	$\text{valB} \leftarrow R[\%esp]$	[Read operand A]
	valB, srcB		Read operand B
Execute	valE	$\text{valE} \leftarrow \text{valB} + -4$	Perform ALU operation
	Cond code		[Set condition code reg.]
Memory	valM	$M_4[\text{valE}] \leftarrow \text{valP}$	[Memory read/write]
Write back	dstE	$R[\%esp] \leftarrow \text{valE}$	[Write back ALU result]
	dstM		Write back memory result
PC update	PC	$\text{PC} \leftarrow \text{valC}$	Update PC

- All instructions follow same general pattern
- Differ in what gets computed on each step