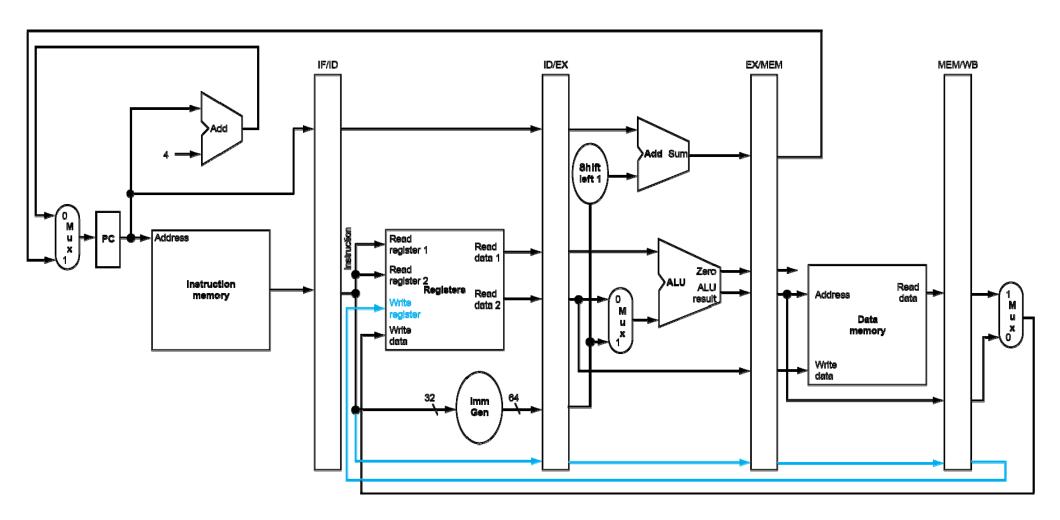


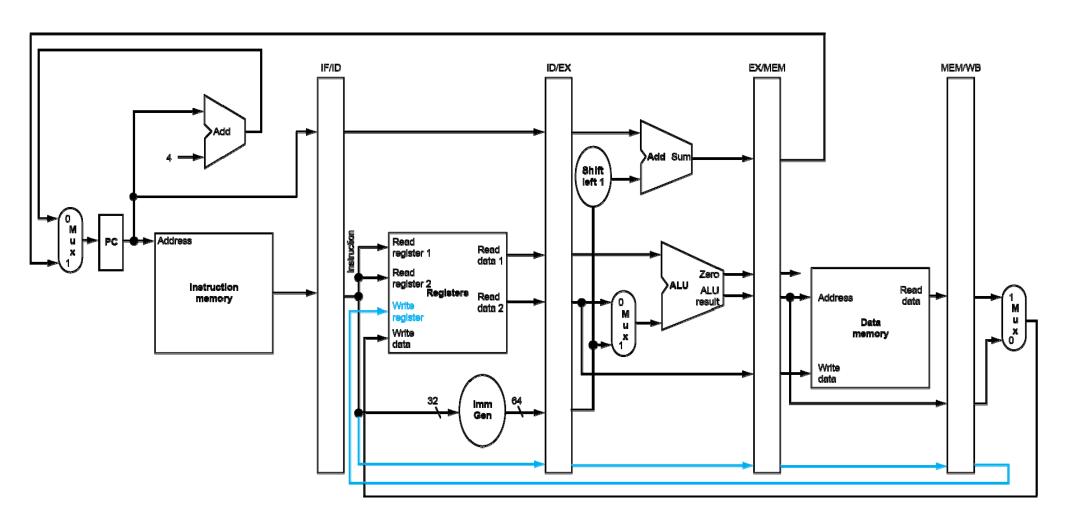
lw x12,30(x2)

sw x13,50(x6)



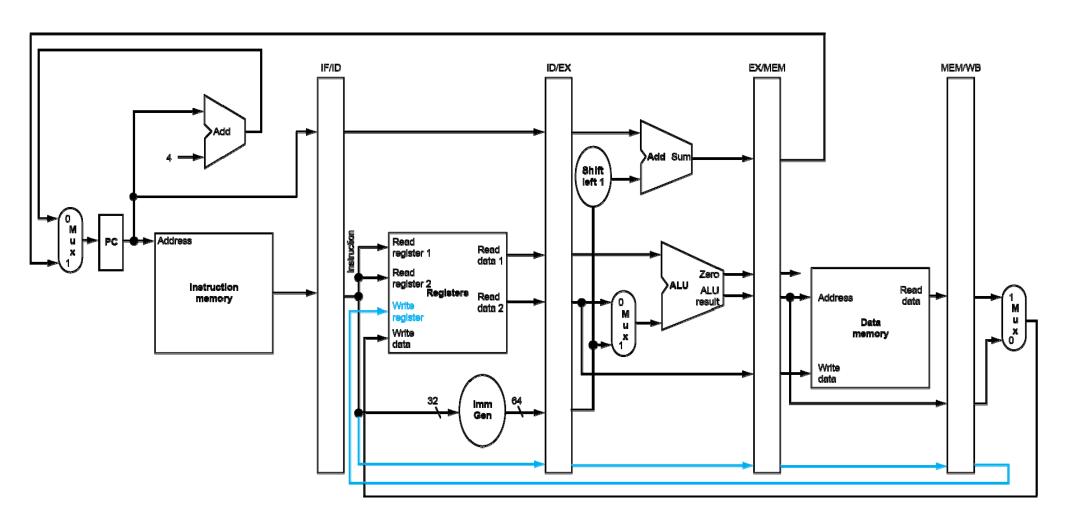
lw x12,30(x2)

sw x13,50(x6)



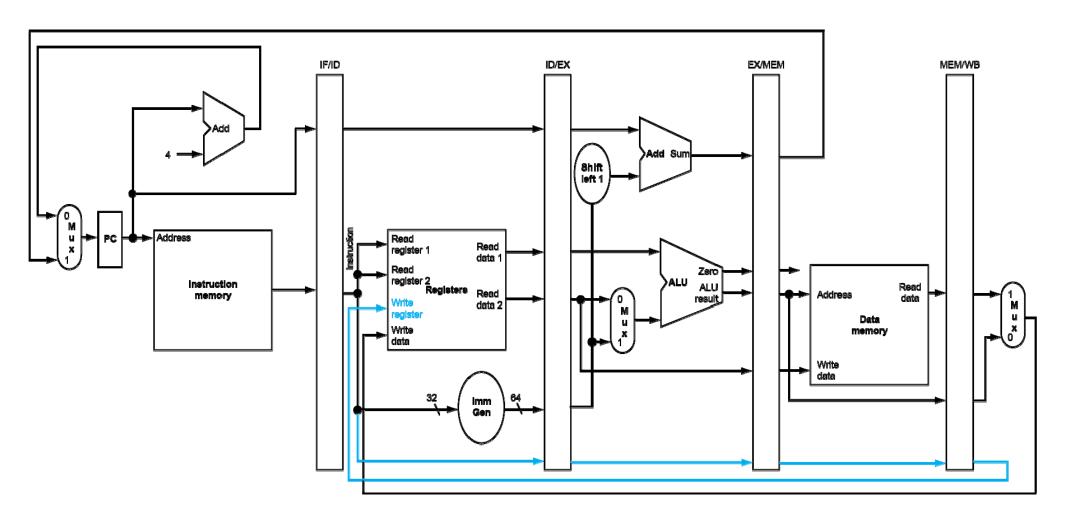
lw x12,30(x2)

sw x13,50(x6)



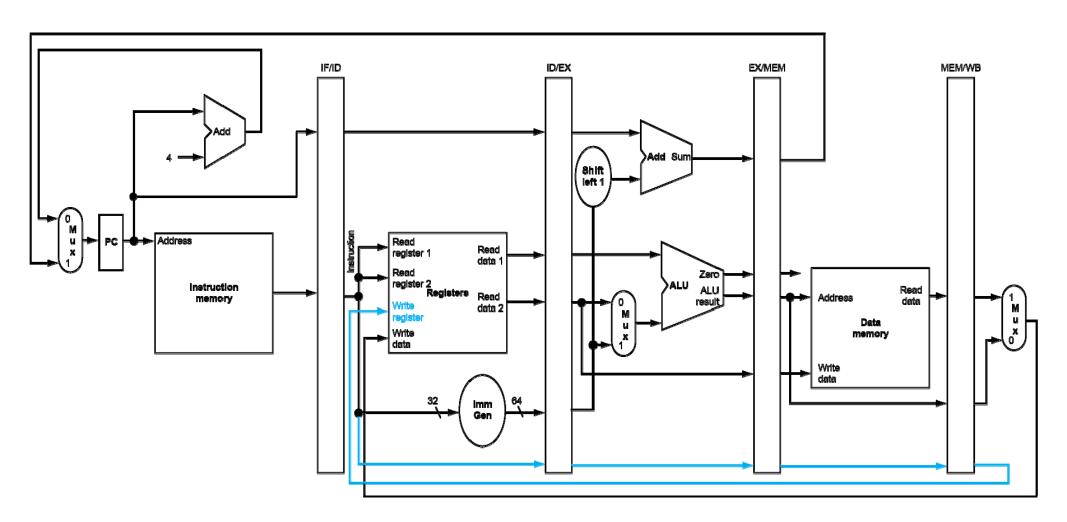
lw x12,30(x2)

sw x13,50(x6)



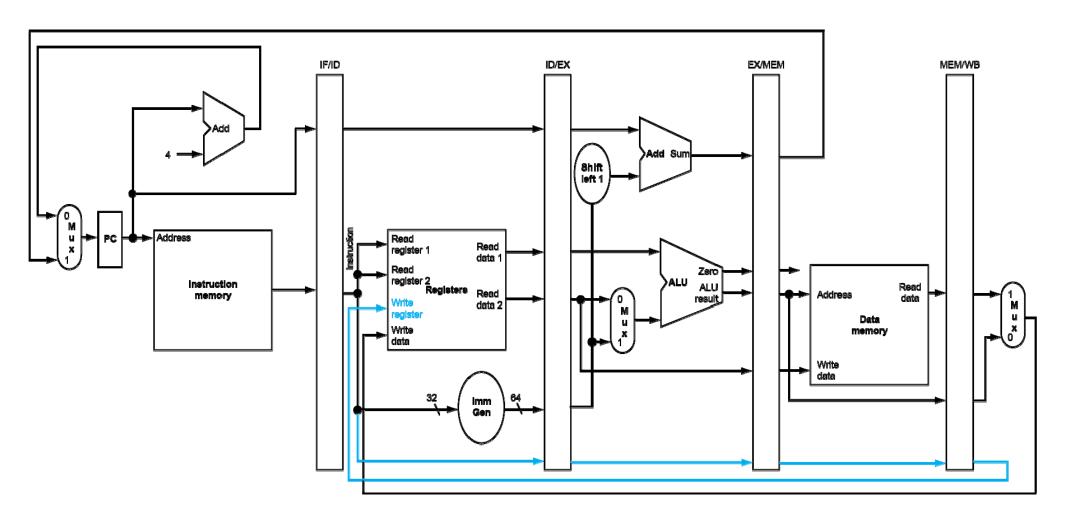
lw x12,30(x2)

sw x13,50(x6)



lw x12,30(x2)

sw x13,50(x6)



lw x12,30(x2)

sw x13,50(x6)

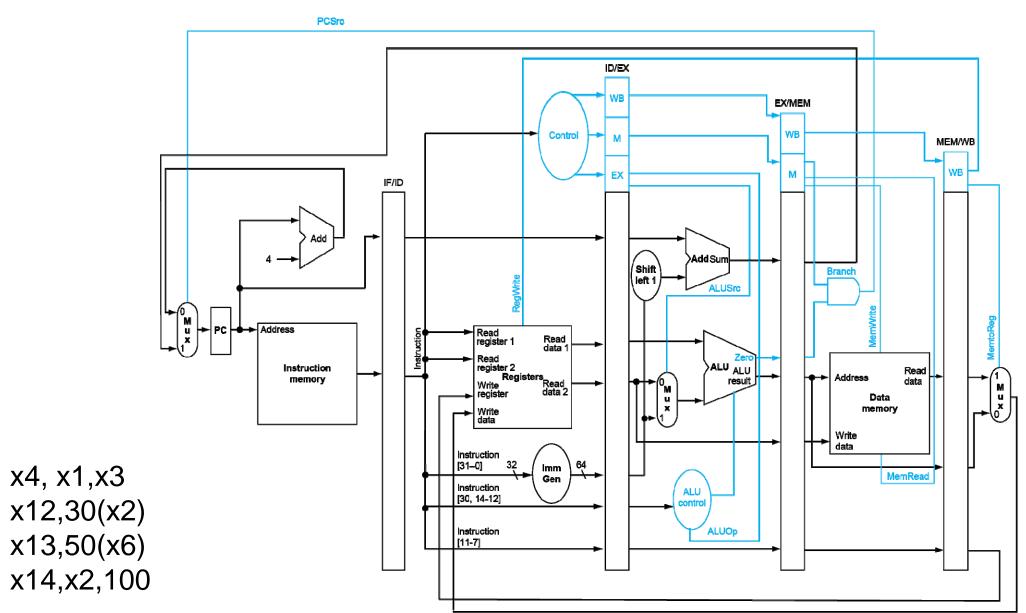
			ess Calo		Memory access stage control lines			Write-back stage control lines	
	Reg ALU ALU				Mem	Mem	Reg		
Instruction	Dst	Op1	Op0		Branch	Read	Write	write	Mem to Reg
R-format									
lw									
SW									
beq									

add

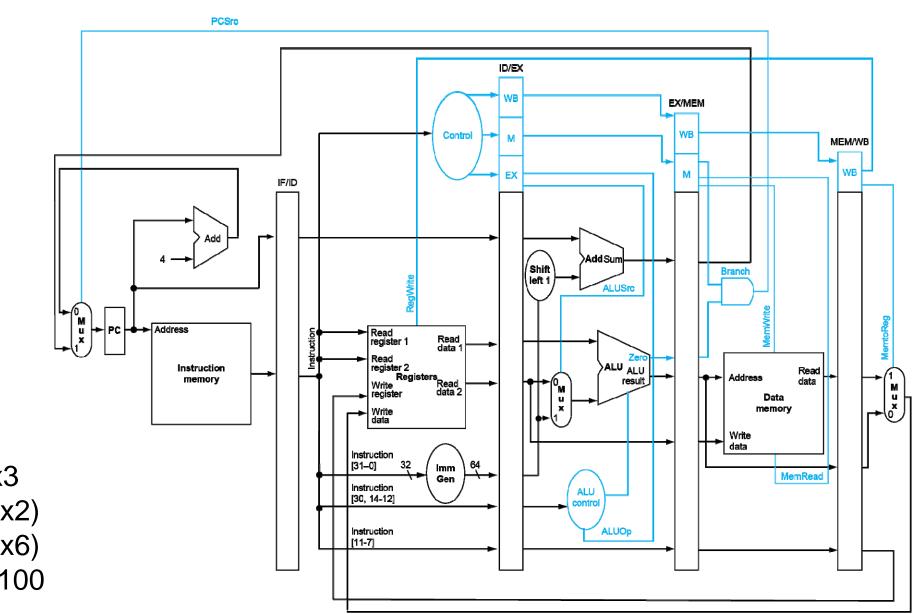
lw

SW

beq

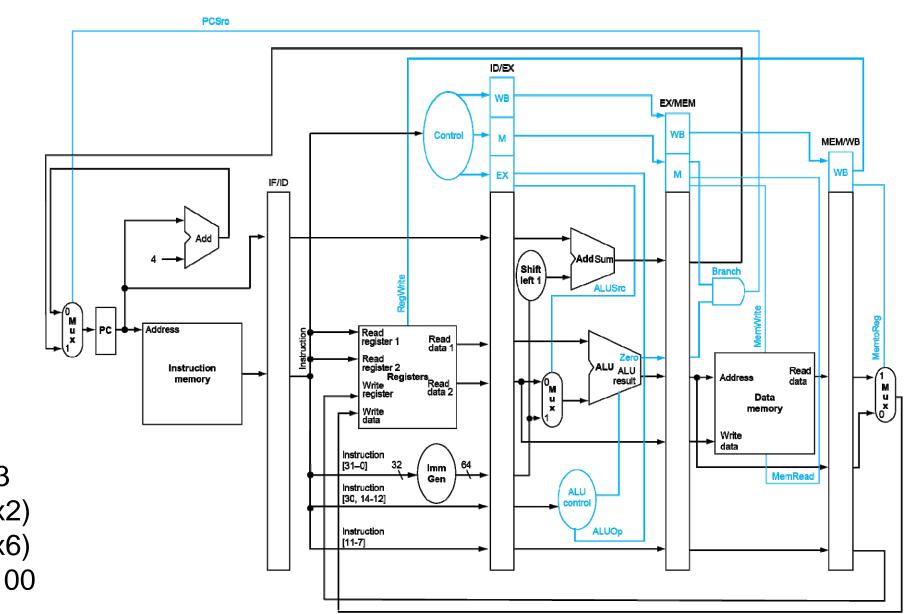


			ess Calo		Memory access stage control lines			Write-back stage control lines	
	Reg ALU ALU				Mem	Mem	Reg		
Instruction	Dst	Op1	Op0		Branch	Read	Write	write	Mem to Reg
R-format									
lw									
SW			·	·				·	
beq									



add x4, x1,x3 lw x12,30(x2) sw x13,50(x6) beq x14,x2,100

			ess Calo		Memory access stage control lines			Write-back stage control lines	
	Reg ALU ALU				Mem	Mem	Reg		
Instruction	Dst	Op1	Op0		Branch	Read	Write	write	Mem to Reg
R-format									
lw									
SW									
beq									



add x4, x1,x3 lw x12,30(x2) sw x13,50(x6) beq x14,x2,100

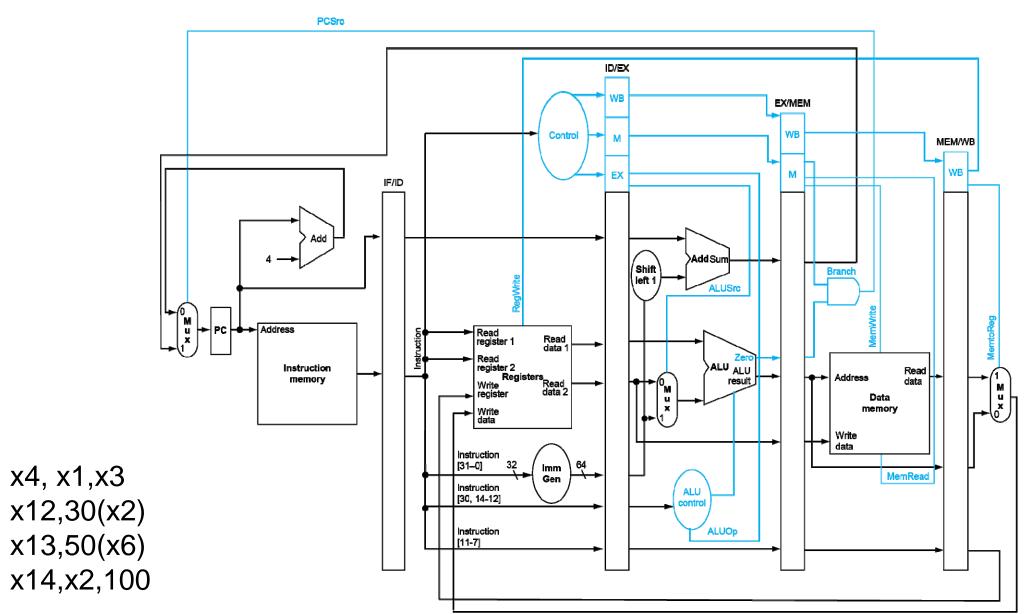
			ess Calo		Memory access stage control lines			Write-back stage control lines	
	Reg ALU ALU				Mem	Mem	Reg		
Instruction	Dst	Op1	Op0		Branch	Read	Write	write	Mem to Reg
R-format									
lw									
SW			·	·				·	
beq									

add

lw

SW

beq



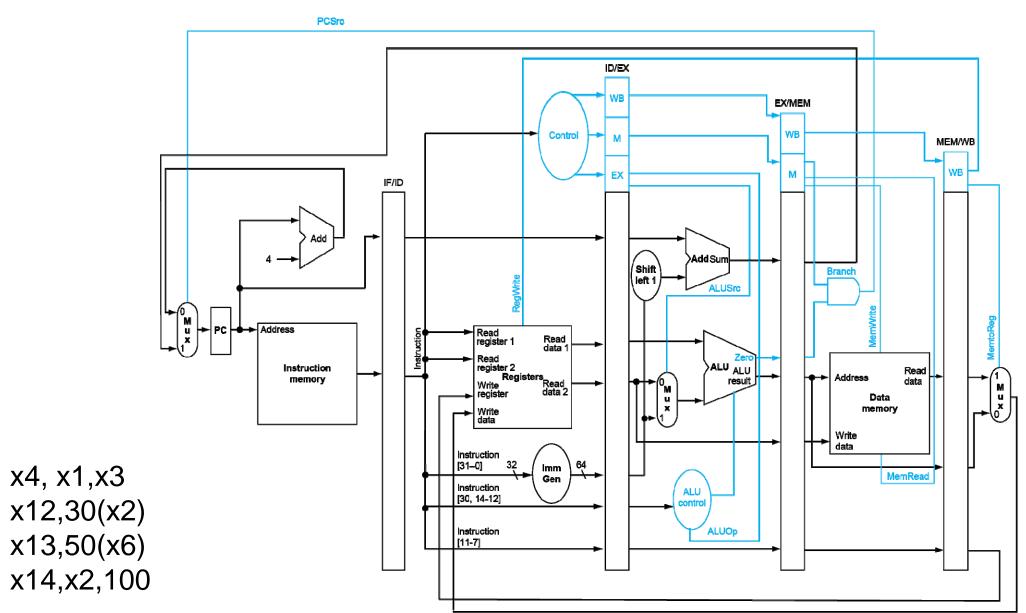
		on/Addr tage cor			Memory access stage control lines			Write-back stage control lines	
	Reg ALU ALU				Mem	Mem	Reg		
Instruction	Dst	Op1	Op0		Branch	Read	Write	write	Mem to Reg
R-format									
lw									
SW									
beq									

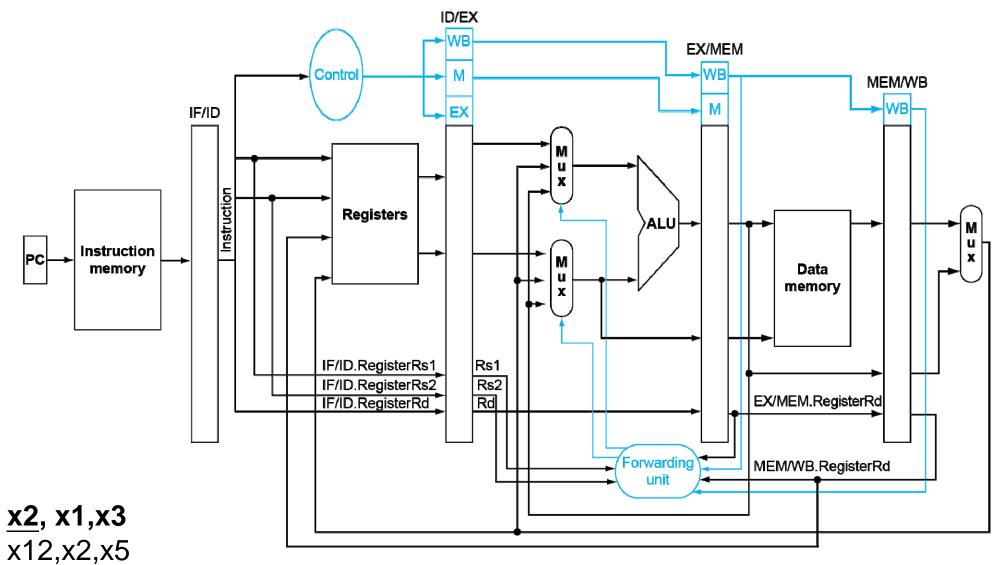
add

lw

SW

beq

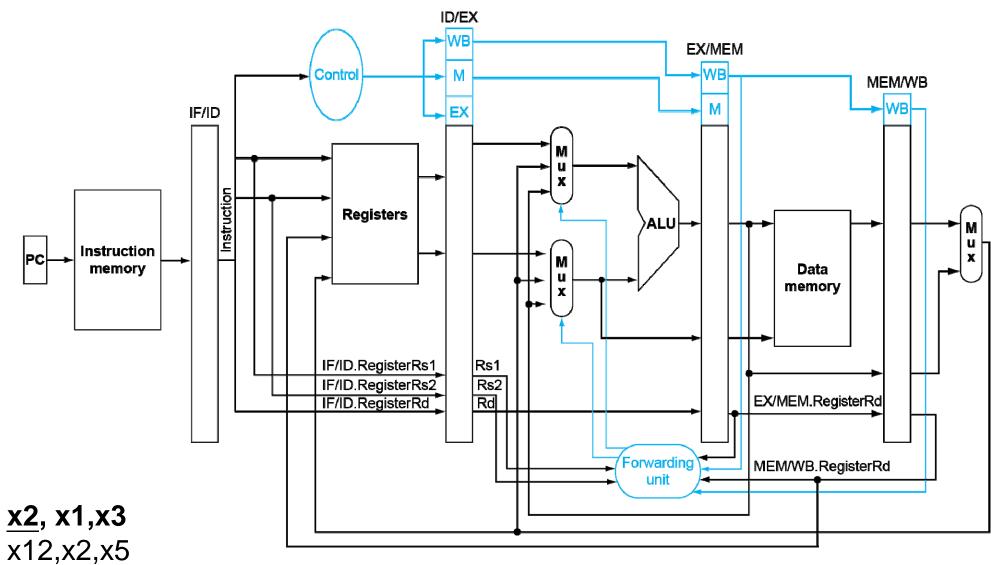




and x12,x2,x5 or x13,x6,x2 add x14,x2,x2

sub

sw x15,100(x2)

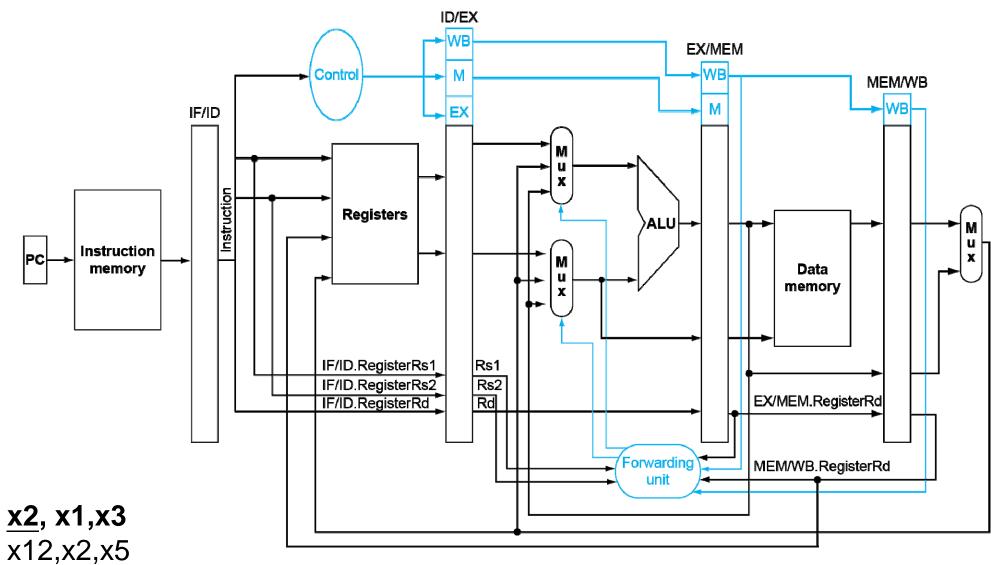


and x12,x2,x5 or x13,x6,x2

sub

add x14,x2,x2

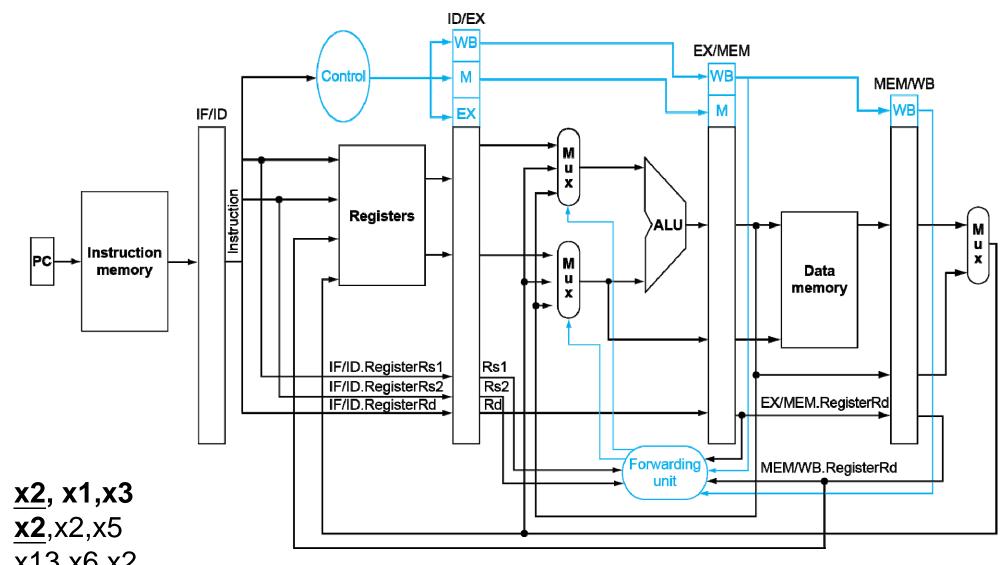
sw x15,100(x2)

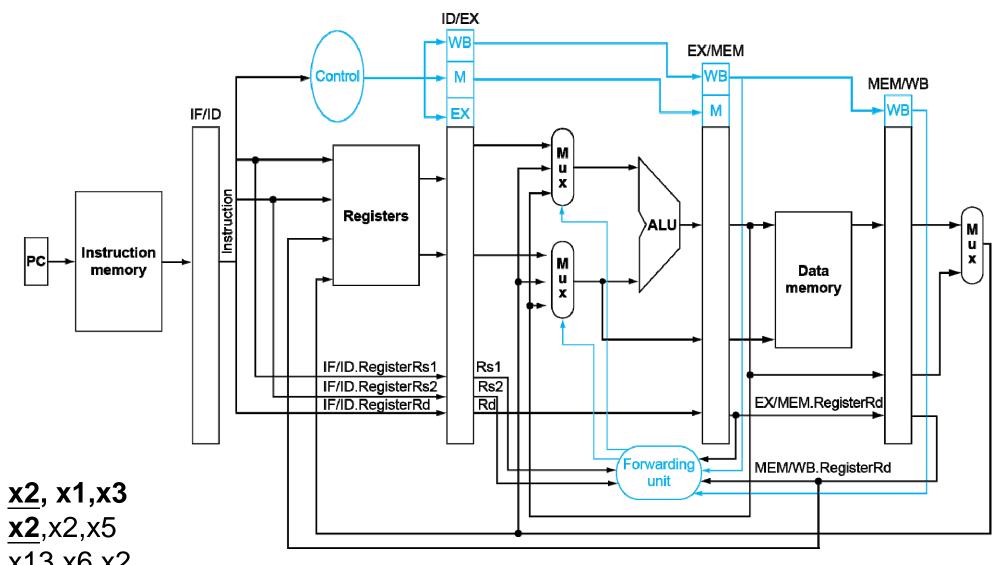


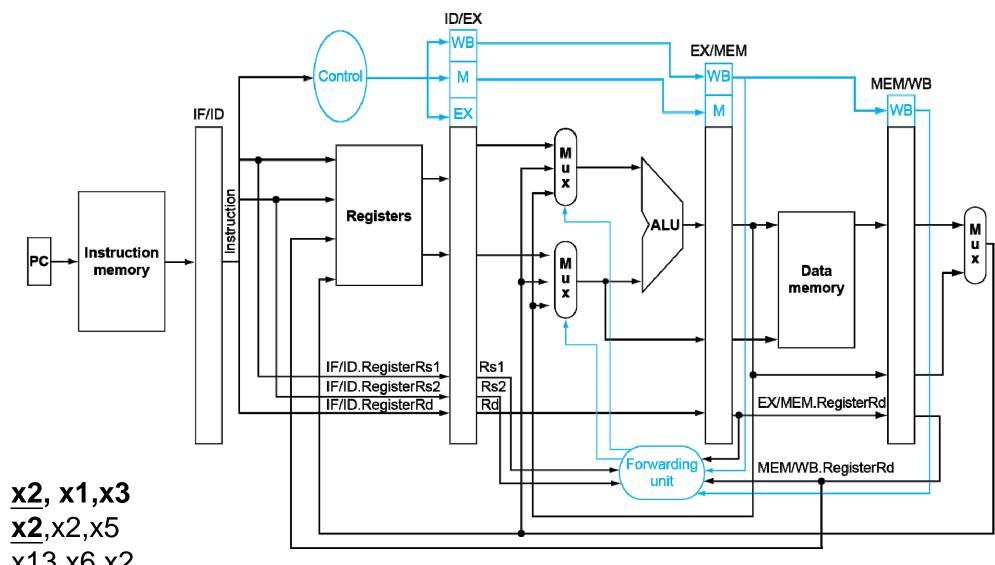
and x12,x2,x5 or x13,x6,x2 add x14,x2,x2

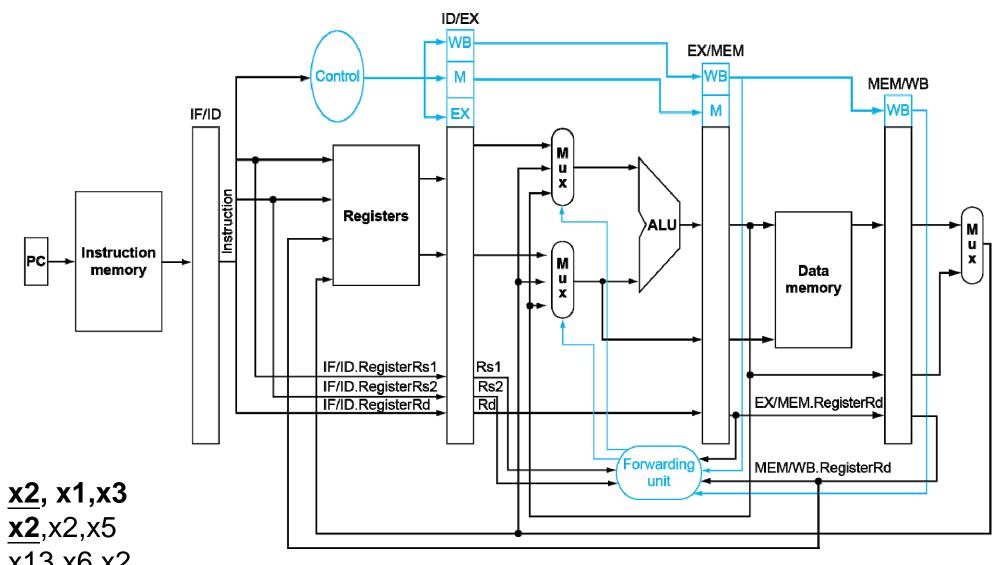
sub

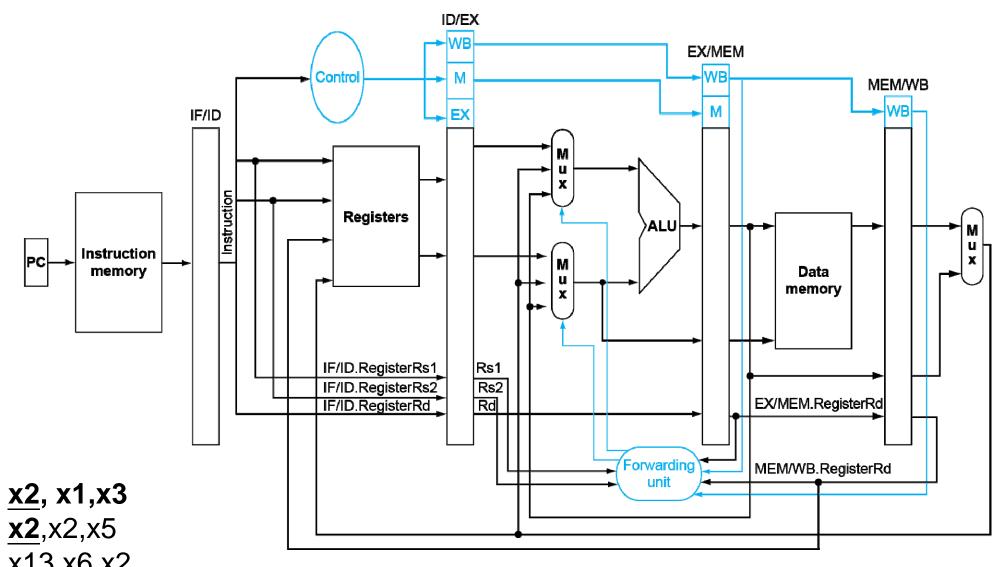
sw x15,100(x2)

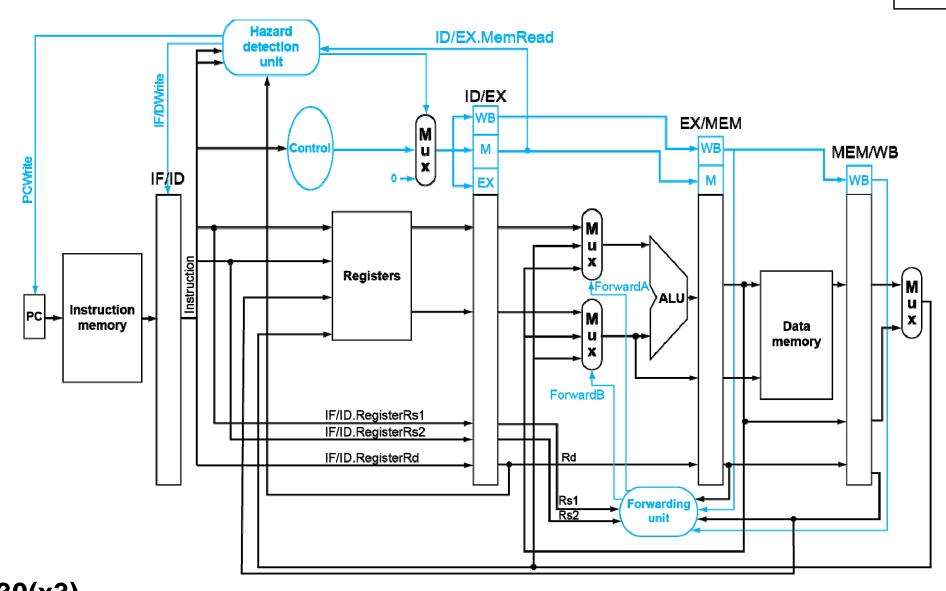




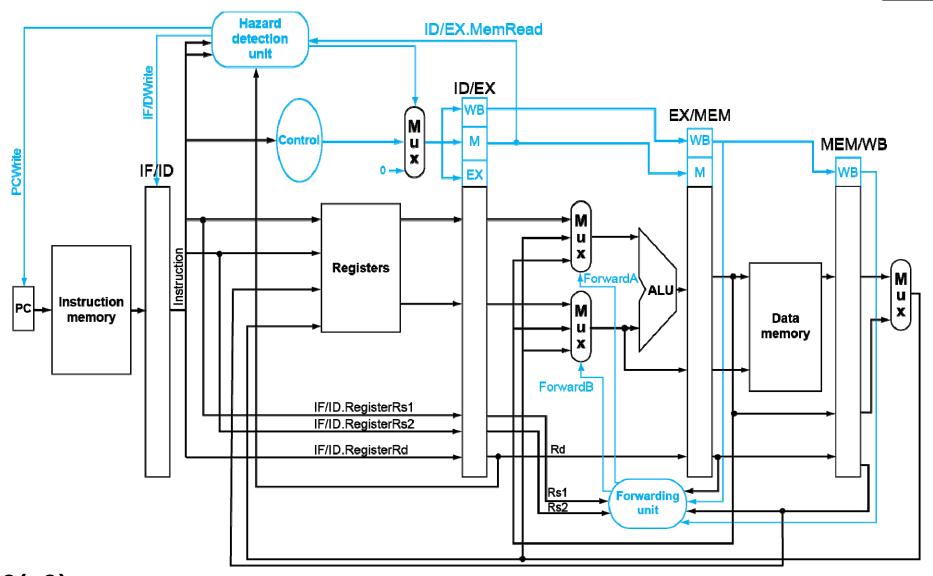






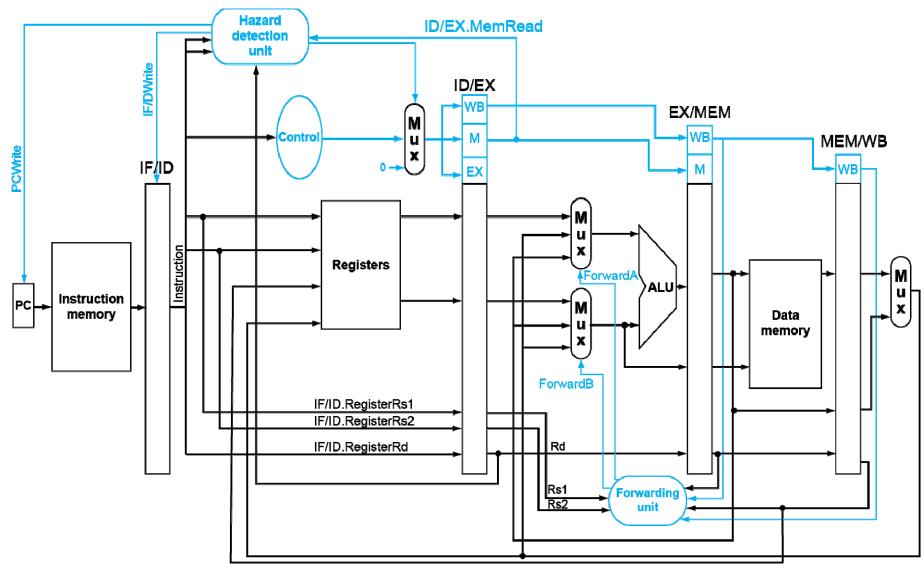


lw x2,30(x3)and x4,x2,x5or x13,x6,x4add x14,x8,x9



lw x2,30(x3) and x4,x2,x5 or x13,x6,x4

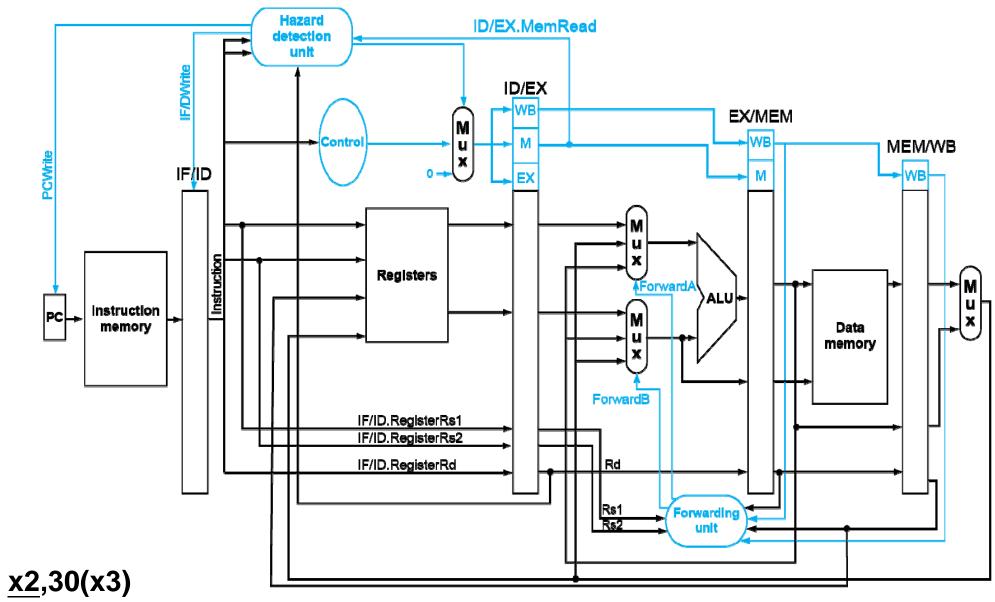
add x14,x8,x9



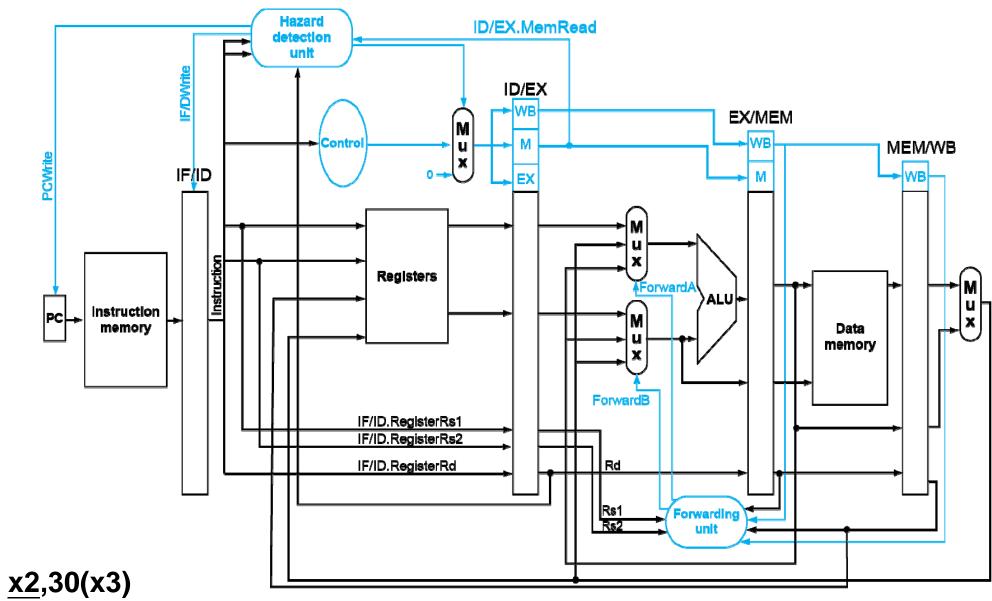
lw x2,30(x3) and x4,x2,x5

or x13,x6,x4

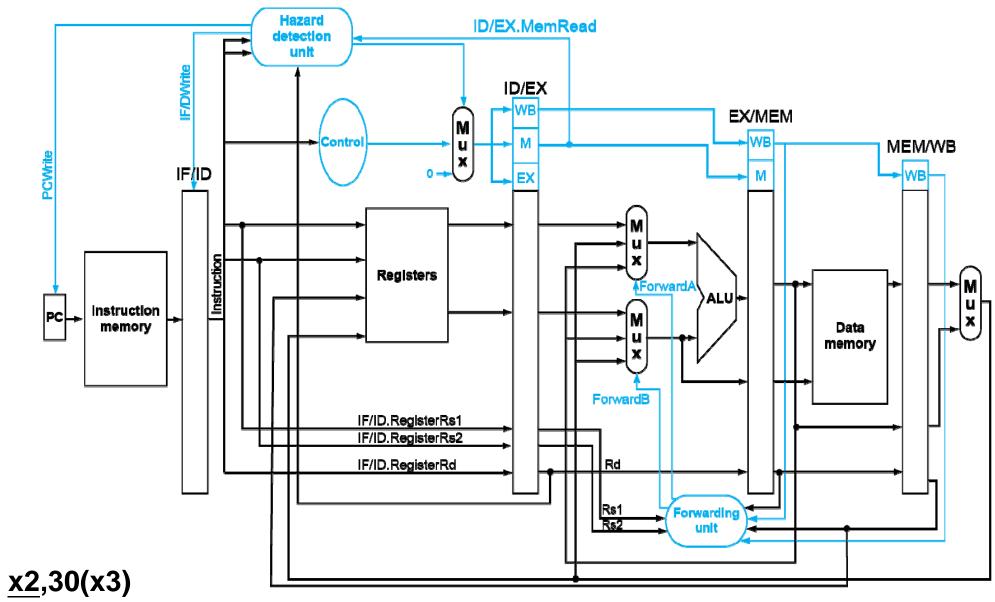
add x14,x8,x9



lw x2,30(x3)and x2,x2,x5or x13,x6,x2add x14,x8,x9



lw x2,30(x3)and x2,x2,x5or x13,x6,x2add x14,x8,x9



lw x2,30(x3)and x2,x2,x5or x13,x6,x2add x14,x8,x9