

CPSC 313
06W Term 2
Problem Set #6 - Solution

1. iaddl:

Stage	iaddl V, rB
Fetch	icode:ifun $\leftarrow M_1[PC]$ rA:rB $\leftarrow M_1[PC + 1]$ valC $\leftarrow M_4[PC + 2]$ valP $\leftarrow PC + 6$
Decode	valB $\leftarrow R[rB]$
Execute	valE $\leftarrow valB + valC$ setCC
Memory	
Write back	$R[rB] \leftarrow valE$
PC update	$PC \leftarrow valP$

2. leave:

Stage	leave
Fetch	icode:ifun $\leftarrow M_1[PC]$ valP $\leftarrow PC + 1$
Decode	valA $\leftarrow R[ebp]$ valB $\leftarrow R[ebp]$
Execute	valE $\leftarrow valB + 4$
Memory	valM $\leftarrow M_4[valA]$
Write back	$R[esp] \leftarrow valE$ $R[ebp] \leftarrow valM$
PC update	$PC \leftarrow valP$

3. The solution to the copy_block problem will not be provided.
4. The solution to the sequential simulator problem will not be provided.