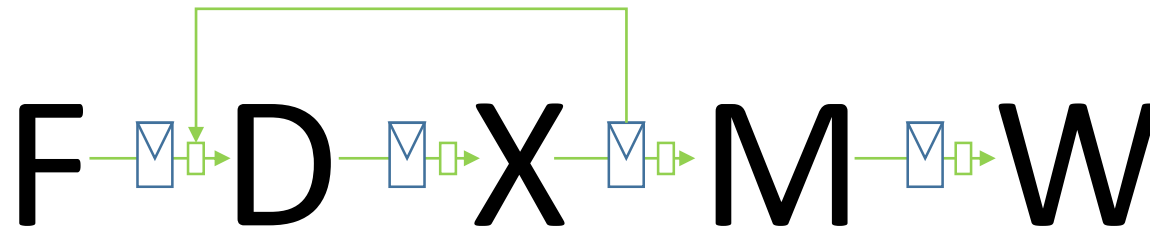


Argon CPU bypassing

There are totally 5 bypass ways

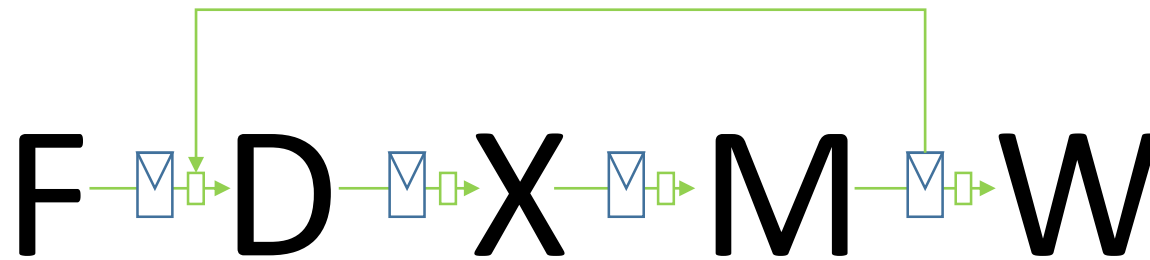
1) After X to D



add R3,R2,R1		F	D	X	M	W		
nop			F	D	X	M	W	
add R4,R3,R1				F	D	X	M	W

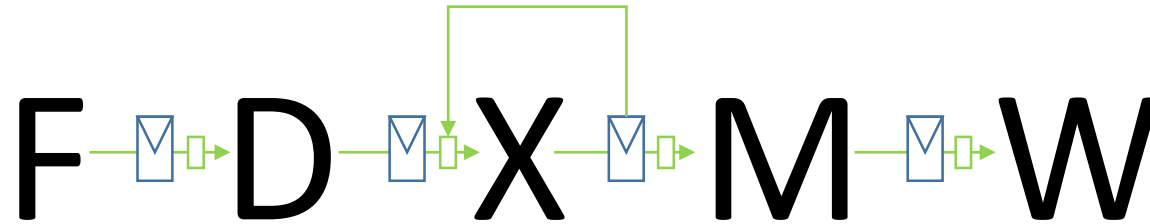
A green arrow points from the 'F' in the third row to the 'F' in the second row.

2) After M to D



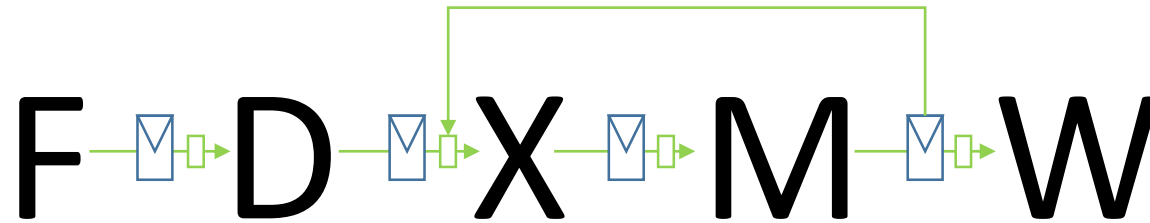
add R3 ,R2 ,R1		F	D	X	M	W
nop			F	D	X	M W
nop				F	D	X M W
add R4 ,R3 ,R1				F	D	X M W

3) After X to X



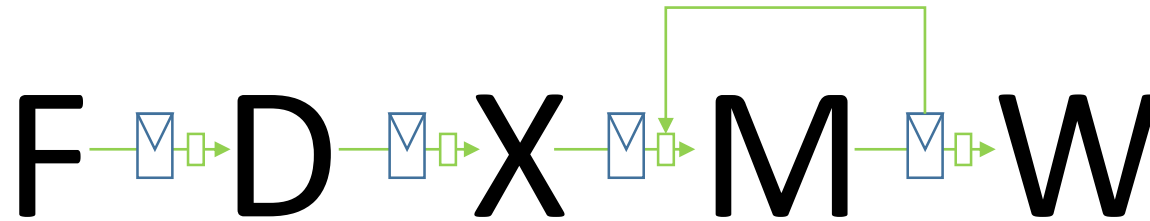
add R3 ,R2 ,R1		F	D	X	M	W	
add R4 ,R3 ,R1			F	D	X	M	W

4) After M to X



<code>lw R3, (R2+255)</code>		F	D	X	M	W	
<code>nop</code>			F	D	X	M	W // (auto stall)
<code>add R4, R3, R1</code>				F	D	X	M W

5) ~~After M to M~~



lw	R3, (R2+255)		F	D	X	M	W
lw	R4, (R3+255)			F	D	X	M W

Don't do this, because memory instructions are of 2 cycles latency