

Problem 1a Normal Pipe Line for Steady State Loop of the Program Execution

	CC1	CC2	CC3	CC4	CC5	CC6	CC7	CC8	CC9	CC10	CC11	CC12	CC13	CC14	CC15	CC16	CC17
daddui \$t2, \$t2, -8	IF	ID	EX	MEM	WB												
ld \$t4, xarray(\$t2)		IF	ID	S/RAW	S/RAW	EX	MEM	WB									
dadd \$t4, \$t4, \$t3			IF	S	S	ID	S/RAW	S/RAW	EX	MEM	WB						
sd \$t4, xarray(\$t2)						IF	S	S	ID	S/RAW	S/RAW	EX	MEM	WB			
daddui \$t1, \$t1, -1									IF	S	S	ID	EX	MEM	WB		
bne \$t1, \$zero, m1												IF	S/RAW	S/RAW	S/RAW	ID	EX/Branch
nop																IF	
daddui \$t2, \$t2, -8																	IF

Question

ID of branch must have t1 before resolving branch taken?