CS613 Homework 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
add x1, x0, x0 // Zero Register	IF	ID	EX	MEM	WB																																										
addi x2, x1, 10 // Set counter (1cv)	IF	ID/S	ID/S	ID/S	S/ID	EX	MEM	WB																																								
addi x5, x0, 2000 // get address of A[]'s first element	IF	ID	EX	MEM	WB																																										
Strt: ld x7, 0(x5) // get A[i]	IF	ID/S	ID/S	ID/S	S/ID	EX	MEM	WB																																							
addi x7, x7, 12	IF	ID/S	ID/S	ID/S	S/ID	EX	MEM	WB																																							
sd x7, 0(x5)	IF	ID/S	S/ID	EX	MEM	WB																																								
addi x5, x5, 8	IF	ID	EX	MEM	WB																																									
subi x2, x2, 1	IF	ID	EX	MEM	WB																																									
bne x2, x1, Strt	IF	ID/S	ID/S	ID/S	S/ID	EX	MEM	WB																																							
End: xor x4, x1 // first loop, don't reach here	IF	ID/S	S/ID	EX	MEM	WB																																								
Strt: ld x7, 0(x5)	IF	ID	EX	MEM	WB																																									
addi x7, x7, 12	IF	ID/S	ID/S	ID/S	S/ID	EX	MEM	WB																																							
sd x7, 0(x5)	IF	ID/S	S/ID	EX	MEM	WB																																								
CPI = clock cycles of program/ instruction count	3.41666667