CS613 Homework 5 - non pipelined section	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	48	49	50	51	52	53	54	55	56	57	58	59	60
add x1, x0, x0 // Zero Register	IF	ID	EX	MEM	WB																																																							
add x2, x0, 10 // Set counter (1cv)						IF	ID	EX	MEM	WB																																																		
add x5, x0, 2000 // Set address of A0's first element											IF	ID	EX	MEM	WB																																													
loop: ld x7, 0(x5) // if we eat A0																IF	ID	EX	MEM	WB																																								
add x8, x7, 12																					IF	ID	EX	MEM	WB																																			
sd x7, 0x5																										IF	ID	EX	MEM	WB																													
add x5, x5, 8																															IF	ID	EX	MEM	WB																							
subi x2, x2, 1																																				IF	ID	EX	MEM	WB																		
bne x2, x1, loop																																									IF	ID	EX	MEM	WB													
Sint: ld x7, 0(x5)																																														IF	ID	EX	MEM	WB									
addi x8, x7, 12																																																			IF	ID	EX	MEM	WB					
sd x7, 0(x5)																																																									IF	ID	EX	MEM	WB

| CPI = clock cycles of program/instruction count | 5 |
| Speedup = instructions unpiped/instructions piped | 1.463415 |