

Instruction	ADD0x	Expected Value	Actual value
SET R1, 0x0384	0x00000	R1=900	R1=900
SET R8, 0x1234	0x00001	R8=4660	R8=4660
SSET R8, 0x5678	0x00002	R8=305419896	R8=305419896
ADDI R5, R1, 20	0x00003	R5=920	R5=920
XOR R3, R1, R5	0x00004	R3=28	R3=28
ADD R4, R8, R3	0x00005	R4=305419924	R4=305419924
LW R1, 0(R0)	0x00006	R1=MEM[0x00000]= 0x00000001	R1=MEM[0x00000]= 0x00000001
LW R2, 1(R0)	0x00007	R2=MEM[0x00001]=0x00000001	R2=MEM[0x00001]=0x00000001
LW R3, 2(R0)	0x00008	R3=MEM[0x00002]=0x0000000A	R3=MEM[0x00002]=0x0000000A
SUB R4, R4, R4	0x00009	R4=0	R4=0
Loop1: ADD R4, R2, R4	0x0000a	Table1_Expected_Loop1	Table1_Actual_Loop1
SLT R6, R2, R3	0x0000b	Table1_Expected_Loop1	Table1_Actual_Loop1
BEQ R6, R0, done	0x0000c	Table1_Expected_Loop1	Table1_Actual_Loop1
ADD R2, R1, R2	0x0000d	Table1_Expected_Loop1	Table1_Actual_Loop1
BEQ R0, R0, Loop1	0x0000e	Table1_Expected_Loop1	Table1_Actual_Loop1
done: SW R4, 0(R0)	0x0000f	Mem[0x00000]=55	Mem[0x00000]=55
MUL R10, R2, R3	0x00010	R10=100	R10=100
SRL R14, R10, R4	0x00011	R14=0	R14=0
SRA R15, R10, R4	0x00012	R15=0	R15=0
RORI R26, R14, 5	0x00013	R26=0	R26=0
JALR R7, R0, func	0x00014	R7=0x00015 , PC=0x0001a	R7=0x00015 , PC=0x0001a
SET R9, 0x4545	0x00015	R9=17733	R9=17733
SET R10, 0x4545	0x00016	R10=17733	R10=17733
BGE R10, R9, L1	0x00017	branch taken	branch taken
ANDI R23, R1, 0xFFFF	0x00018		
L1: BEQ R0, R0, L1	0x00019	Program Terminated INFINITE LOOP	Program Terminated INFINITE LOOP
func: OR R5, R2, R3	0x0001a	R5=10	R5=10
LW R1, 0(R0)	0x0001b	R1=MEM[0x00000]=55	R1=MEM[0x00000]=55
LW R2, 5(R1)	0x0001c	R2=MEM[0x00005]=0 R2=MEM[60]=0x128945ac	R2=MEM[0x00005]=0
LW R3, 6(R1)	0x0001d	R3=MEM[0x00006]=0 R3=MEM[61]=0x05007342	R3=MEM[0x00006]=0

AND R4, R2, R3	0x0001e	R4=0 16640	R4=0
SW R4, 0(R0)	0x0001f	Mem[0x00000]=0 16640	Mem[0x00000]=0
JALR R0, R7, 0	0x00020	PC=0x00015	PC=0x00015

Table1_Expected_Loop1

i	R4+=R2	R6=(R2<R3)	B1	R2+=R1	B2
0	1		1 F	2 T	
1	3		1 F	3 T	
2	6		1 F	4 T	
3	10		1 F	5 T	
4	15		1 F	6 T	
5	21		1 F	7 T	
6	28		1 F	8 T	
7	36		1 F	9 T	
8	45		1 F	10 T	
9	55		0 1 T		

Table1_Actual_Loop1

i	R4+=R2	R6=(R2<R3)	B1	R2+=R1	B2
0	1		1 F	2 T	
1	3		1 F	3 T	
2	6		1 F	4 T	
3	10		1 F	5 T	
4	15		1 F	6 T	
5	21		1 F	7 T	
6	28		1 F	8 T	
7	36		1 F	9 T	

8	45	1 F	10 T
9	55	0 1 T	