Instruction	address	Expected value	Actual value
SET R1, 0x0384	0x0000B	R1 = 0x00000384	R1 = 0x00000384
SET R8, 0x1234	0x0000C	R8 = 0x00001234	R8 = 0x00001234
SSET R8, 0x5678	0x0000D	R8 = 0x12345678	R8 = 0x12345678
ADDI R5, R1, 20	0x0000E	R5 = 0x00000398	R5 = 0x00000398
XOR R3, R1, R5	0x0000F	R3 = 0x0000001C	R3 = 0x0000001C
ADD R4, R8, R3	0x00010	R4 = 0x12345694	R4 = 0x12345694
LW R1, 0(R0)	0x00011	R1 = Mem[0] = 0x00000001	R1 = Mem[0] = 0x00000001
LW R2, 1(R0)	0x00012	R2 = Mem[1] = 0x00000001	R2 = Mem[1] = 0x00000001
LW R3, 2(R0)	0x00013	R3 = Mem[2] = 0x0000000A	R3 = Mem[2] = 0x0000000A
SUB R4, R4, R4	0x00014	R4 = 0x00000000	R4 = 0x00000000
Loop1: ADD R4, R2, R4	0x00015	R4 = 0x00000001	R4 = 0x00000001
SLT R6, R2, R3	0x00016	R6 = 0x00000001	R6 = 0x00000001
BEQ R6, R0, done	0x00017	Branch = 0	Branch = 0
ADD R2, R1, R2	0x00018	R2 = 0x00000002	R2 = 0x00000002
BEQ R0, R0, Loop1	0x00019	Branch = 1	Branch = 1
done: SW R4, 0(R0)	0x0001a	killed	killed
MUL R10, R2, R3	0x0001b	killed	killed
Loop1: ADD R4, R2, R4	0x00015	R4 = 0x00000003	R4 = 0x00000003
SLT R6, R2, R3	0x00016	R6 = 0x00000001	R6 = 0x00000001
BEQ R6, R0, done	0x00017	Branch = 0	Branch = 0
ADD R2, R1, R2	0x00018	R2 = 0x00000003	R2 = 0x00000003
BEQ R0, R0, Loop1	0x00019	Branch = 1	Branch = 1
done: SW R4, 0(R0)	0x0001a	killed	killed
MUL R10, R2, R3	0x0001b	killed	killed
Loop1: ADD R4, R2, R4	0x00015	R4 = 0x00000006	R4 = 0x00000006
SLT R6, R2, R3	0x00016	R6 = 0x00000001	R6 = 0x00000001
BEQ R6, R0, done	0x00017	Branch = 0	Branch = 0
ADD R2, R1, R2	0x00018	R2 = 0x00000004	R2 = 0x00000004
BEQ R0, R0, Loop1	0x00019	Branch = 1	Branch = 1
done: SW R4, 0(R0)	0x0001a	killed	killed
MUL R10, R2, R3	0x0001b	killed	killed
Loop1: ADD R4, R2, R4	0x00015	R4 = 0x0000000A	R4 = 0x0000000A
SLT R6, R2, R3	0x00016	R6 = 0x00000001	R6 = 0x00000001
BEQ R6, R0, done	0x00017	Branch = 0	Branch = 0

ADD R2, R1, R2	0x00018	R2 = 0x00000005	R2 = 0x00000005
BEQ R0, R0, Loop1	0x00019	Branch = 1	Branch = 1
done: SW R4, 0(R0)	0x0001a	killed	killed
MUL R10, R2, R3	0x0001b	killed	killed
Loop1: ADD R4, R2, R4	0x00015	R4 = 0x0000000f	R4 = 0x0000000f
SLT R6, R2, R3	0x00016	R6 = 0x00000001	R6 = 0x00000001
BEQ R6, R0, done	0x00017	Branch = 0	Branch = 0
ADD R2, R1, R2	0x00018	R2 = 0x00000006	R2 = 0x00000006
BEQ R0, R0, Loop1	0x00019	Branch = 1	Branch = 1
done: SW R4, 0(R0)	0x0001a	killed	killed
MUL R10, R2, R3	0x0001b	killed	killed
Loop1: ADD R4, R2, R4	0x00015	R4 = 0x00000015	R4 = 0x00000015
SLT R6, R2, R3	0x00016	R6 = 0x00000001	R6 = 0x00000001
BEQ R6, R0, done	0x00017	Branch = 0	Branch = 0
ADD R2, R1, R2	0x00018	R2 = 0x00000007	R2 = 0x00000007
BEQ R0, R0, Loop1	0x00019	Branch = 1	Branch = 1
done: SW R4, 0(R0)	0x0001a	killed	killed
MUL R10, R2, R3	0x0001b	killed	killed
Loop1: ADD R4, R2, R4	0x00015	R4 = 0x0000001C	R4 = 0x0000001C
SLT R6, R2, R3	0x00016	R6 = 0x00000001	R6 = 0x00000001
BEQ R6, R0, done	0x00017	Branch = 0	Branch = 0
ADD R2, R1, R2	0x00018	R2 = 0x00000008	R2 = 0x00000008
BEQ R0, R0, Loop1	0x00019	Branch = 1	Branch = 1
done: SW R4, 0(R0)	0x0001a	killed	killed
MUL R10, R2, R3	0x0001b	killed	killed
Loop1: ADD R4, R2, R4	0x00015	R4 = 0x00000024	R4 = 0x00000024
SLT R6, R2, R3	0x00016	R6 = 0x00000001	R6 = 0x00000001
BEQ R6, R0, done	0x00017	Branch = 0	Branch = 0
ADD R2, R1, R2	0x00018	R2 = 0x00000009	R2 = 0x00000009
BEQ R0, R0, Loop1	0x00019	Branch = 1	Branch = 1
done: SW R4, 0(R0)	0x0001a	killed	killed
MUL R10, R2, R3	0x0001b	killed	killed

Loop1: ADD R4, R2, R4	0x00015	R4 = 0x0000002D	R4 = 0x0000002D
SLT R6, R2, R3	0x00016	R6 = 0x00000001	R6 = 0x00000001
BEQ R6, R0, done	0x00017	Branch = 0	Branch = 0
ADD R2, R1, R2	0x00018	R2 = 0x0000000A	R2 = 0x0000000A
BEQ R0, R0, Loop1	0x00019	Branch = 1	Branch = 1
done: SW R4, 0(R0)	0x0001a	killed	killed
MUL R10, R2, R3	0x0001b	killed	killed
Loop1: ADD R4, R2, R4	0x00015	R4 = 0x00000037	R4 = 0x00000037
SLT R6, R2, R3	0x00016	R6 = 0x00000000	R6 = 0x00000000
BEQ R6, R0, done	0x00017	Branch = 1	Branch = 1
ADD R2, R1, R2	0x00018	killed	killed
BEQ R0, R0, Loop1	0x00019	killed	killed
done: SW R4, 0(R0)	0x0001A	Mem[0] = 0x00000037, R0 = 0x00000000	Mem[0] = 0x00000037, R0 = 0x00000000
MUL R10, R2, R3	0x0001B	R10 = 0x00000064	R10 = 0x00000064
SRL R14, R10, R4	0x0001C	R14 = 0x00000000	R14 = 0x00000000
SRA R15, R10, R4	0x0001D	R15 = 0x00000000	R15 = 0x00000000
RORI R26, R14, 5	0x0001E	R26 = 0x00000000	R26 = 0x00000000
JALR R7, R0, func	0x0001F	PC = func, R7 = 0x00000020	PC = func, R7 = 0x00000020
SET R9, 0x4545	0x00020	killed	killed
func: OR R5, R2, R3	0x00025	R5 = 0x0000000A	R5 = 0x0000000A
LW R1, 0(R0)	0x00026	R1 = 0x00000037	R1 = 0x00000037
LW R2, 5(R1)	0x00027	R2 = 0x128945AC	R2 = 0x128945AC
LW R3, 6(R1)	0x00028	stall	stall
LW R3, 6(R1)	0x00028	R3 = 0x05007342	R3 = 0x05007342
AND R4, R2, R3	0x00029	R4 = 0x00004100	R4 = 0x00004100
SW R4, 0(R0)	0x0002A	stall	stall
SW R4, 0(R0)	0x0002A	Mem[0] = 0x00004100	Mem[0] = 0x00004100
JALR R0, R7, 0	0x0002B	PC = 0x00020, R0 = 0x00000000	PC = 0x00020, R0 = 0x00000000
-	0x0002C	killed	killed
SET R9, 0x4545	0x00020	R9 = 0x00004545	R9 = 0x00004545

SET R10, 0x4545	0x00021	R10 = 0x00004545	R10 = 0x00004545
BGE R10, R9, L1	0x00022	Branch = 1	Branch = 1
ANDI R23, R1, 0xFFFF	0x00023	killed	killed
L1: BEQ R0, R0, L1	0x00024	killed	killed
L1: BEQ R0, R0, L1	0x00024	infinite loop: End	infinite loop: End
func: OR R5, R2, R3	0x00025	killed	killed
LW R1, 0(R0)	0x00026	killed	killed