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| --- | --- | --- |
| Instruction number | Instruction | Hex |
| 000001 | addi $1,$0,15 | 0x1001000F |
| 000002 | addi $2,$0,88 | 0x10020058 |
| 000003 | add $3,$1,$2 | 0x00123000 |
| 000004 | sub $4,$2,$1 | 0x01214000 |
| 000005 | and $5,$3,$1 | 0x04315000 |
| 000006 | or $6,$2,$4 | 0x05246000 |
| 000007 | xor $7,$2,$5 | 0x06257000 |
| 000008 | eqv $8,$3,$4 | 0x07348000 |
| 000009 | andi $9,$4,21 | 0x14490015 |
| 00000a | ori $10,$5,33 | 0x155A0021 |
| 00000b | xori $11,$6,18 | 0x166B0012 |
| 00000c | sll $12,$2,3 | 0x182C0003 |
| 00000d | srl $13,$8,14 | 0x198D000E |
| 00000e | ror $14,$13,8 | 0x1BDE0008 |
| 00000f | slt $1,$2,$3 | 0x02231000 |
| 000010 | sltu $2,$8,$7 | 0x03872000 |
| 000011 | beq $1,$2,label | 0x30120003 |
| 000012 | slti $1,$0,-7 | 0x1201FFF9 |
| 000013 | sltiu $2,$0,-7 | 0x1302FFF9 |
| 000014 | bne $1,$2,l2 | 0x31120001 |
| 000015 | label: SETH $5,44 | 0x1c55002c |
| 000016 | l2: SETH $5,45 | 0x1c55002d |
| 000017 | j l3 | 0x50000019 |
| 000018 | SETH $6,55 | 0x1C660037 |
| 000019 | l3: addi $9,$0,26 | 0x1009001A |
| 00001a | sw $6,4($8) | 0x21860004 |
| 00001b | lw $1, 4($8) | 0x20810004 |
| 00001c | jal l4 | 0x5100002A |
| 00001d | j l5 | 0x5000001f |
| 00001e | sw $9,12($8) | 0x2189000c |
| 00001f | l5: sw $10,12($8) | 0x218a000c |
| 000020 | sltiu $1,$14,1 | 0x13e10001 |
| 000021 | addi $2,$0,1 | 0x10020001 |
| 000022 | Beq $1, $2, I4 | 0x30120007 |
| 000023 | sw $12,16($8) | 0x218c0010 |
| 000024 | l6: sw $13,16($8) | 0x218d0010 |
| 000025 | addi $1,$0,-7 | 0x1001fff9 |
| 000026 | l7: sw $6,20($8) | 0x21860014 |
| 000027 | add $1,$0,$0 | 0x00001000 |
| 000028 | I8: sw $4,24($8) | 0x21840018 |
| 000029 | j exit | 0x5000002c |
| 00002a | l4: sw $7,8($8) | 0x21870008 |
| 00002b | jr $15 | 0x40f00000 |
| 00002c | exit: | 0x60000000 |

Output

R1= 0x00000000

R2= 0x00000001

R3= 0x00000067

R4= 0x00000049

R5= 0x002d0007

R6= 0x00000059

R7= 0x0000005f

R8= 0xffffffd1

R9= 0x0000001a

R10=0x00000027

R11=0x0000004b

R12=0x000002c0

R13=0x0003ffff

R14=0x000003ff

R15=0x0000001d

|  |  |
| --- | --- |
| Memory address | Value |
| Ffffd5 | 0x00000059 |
| Ffffd9 | 0x0000005f |
| ffffdd | 0x00000027 |
| Ffffe1 | 0x0003ffff |
| Ffffe5 | 0x00000059 |
| Ffffe9 | 0x00000049 |