The following is the sequence of machine codes that perform iterative Fibonacci.

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| --- | --- | --- |
| Instructrion (Hex) | Assembly | Bin |
| 10000917 | auipc x18, 65536 | 00010000000000000000100100010111 |
| 00090913 | addi x18, x18, 0 | 000000000000**10010**000100100010011 |
| 00a00993 | addi x19, x0, 10 | 000000001010**00000**000100110010011 |
| 00200e13 | addi x28, x0, 2 | 000000000010**00000**000111000010011 |
| 00000a13 | addi x20, x0, 0 | 000000000000**00000**000101000010011 |
| 00490e93 | addi x29, x18, 4 | 000000000100**10010**000111010010011 |
| 00100a93 | addi x21, x0, 1 | 000000000001**00000**000101010010011 |
| 015ea023 | sw x21, 0(x29) | 000000010101**11101**010000000100011 |
| 002e1e93 | slli x29, x28, 2 | 000000000010**11100**001111010010011 |
| 015a0b33 | add x22, x20, x21 | 000000010101**10100**000101100110011 |
| 000a8a13 | addi x20, x21, 0 | 000000000000**10101**000101000010011 |
| 000b0a93 | addi x21, x22, 0 | 000000000000**10110**000101010010011 |
| 01d90bb3 | add x23, x18, x29 | 000000011101**10010**000101110110011 |
| 016ba023 | sw x22, 0(x23) | 000000010110**10111**010000000100011 |
| 001e0e13 | addi x28, x28, 1 | 000000000001**11100**000111000010011 |
| 013e2f33 | slt x30, x28, x19 | 000000010011**11100**010111100110011 |
| fe0f10e3 | bne x30, x0, -32 | 111111100000**11110**001000011100011 |
| 00000013 | addi x0, x0, 0 | 000000000000**00000**000000000010011 |
| 10000917 | auipc x18, 65536 | 00010000000000000000100100010111 |

RISC-V Instruction Encoder/Decoder

<https://luplab.gitlab.io/rvcodecjs/>