```
//Program 1, adder
    rom[16'd74]=16'b01111_010_0110_0101;    //movil r2, 0110 0101
    rom[16'd75]=16'b10000_010_0000_0000;    //movih r2, 0000 0000
    rom[16'd76]=16'b01111_111_0000_0001;    //movil r7, 0000 0001
    rom[16'd77]=16'b10000_111_0000_0000;    //movih r7, 0000 0000
    rom[16'd78]=16'b01111_001_0000_0010;    //movil r1, 0000 0010
    rom[16'd79]=16'b10000_001_000_00000;    //movil r1, 0000 0000
    rom[16'd80]=16'b00000_001_111_00000;    //adc r1, r7: r7=r7+1
    rom[16'd81]=16'b00100_001_0000_0001;    //addi 1, r1: r1=r1+1
    rom[16'd82]=16'b00101_001_010_00000;    //cmp r1, r2
    rom[16'd83]=16'b11011_100_000_00011;    //jrnz PC-3
    rom[16'd84]=16'b11111_000_000_00000;    //hlt
```