0011 0000 0000 0000 ; (start address at 0x3000) ; This program use 5 register

; 001 the number of x3100 010 the left shifted of num

; 011 the last number to shift 100 the number of '1'

; 101 the 100reg -3

0010 001 011111111; load 0x3100 number to reg001

0001 010 001 1 00000; 010 reg store the now number we check

0101 011 011 1 00000; clean 010 register

0101 100 100 1 00000; clean 100 register

0001 011 011 1 01111; add r3,15

0001 011 011 1 00001; add r3,1

;loop

0000 010 000001010;if r3 = 0 ,jmp

0001 010 010 1 00000; reput condition code

0000 011 000000010; if r2=0 jmp 22'

0001 100 100 1 00001; add r4,1

0000 111 000000001; jmp 22'

0101 100 100 1 00000; clean 100 register

0001 101 100 1 11101; r5 = r4 - 3

0000 011 000000011; if r5 =0.jmp break out.

0001 010 010 0 00 010; left shifted 010reg mean 010 reg 2

0001 011 011 1 11111; add 011reg -1;

0000 111 111110101;

0101 010 010 1 00000; clean reg010

0001 011 011 1 00000;

0000 001 000000010; postive or zero

0001 010 010 1 00000;

0000 111 000000001;

0001 010 010 1 00001;

1111 0000 0010 0101 ; halting code