### **Demo Program**

R0 = 0

R1 = 0

R4 = 1 (load from main memory)

R2 <= MM[1]

R3 <= MM[2]

Loop: R1 = R1 + R2

R3 = R3 -1

BNE R3, 0, Loop

R1 -> MM[7]

R3 <= MM[7]

R0 = FF

Jmp 31

--Comments--

//R# is the register at position #

R0 = 0 //initial value

R1 = 0 //initial value

R4 = 1 (load from main memory)

R2 <= MM[1] //R2 is assigned the value at MM[1]

R3 <= MM[2] //R3 is assigned the value at MM[2]

//multiplication

Loop: R1 = R1 + R2

R3 = R3 -1 //decrements counter

BNE R3, 0, Loop //if R3!+0,

R1 -> MM[7] //value of R1 is stored in MM[7]?

R3 <= MM[7] //R3 is assigned the value in MM[7]?

R0 = FF

Jmp 31 //jump to address 31

//this would end the program since 31 is the last address