

15/2/24



DATE / /

0xFFFF FFFF

peripherals

8G

Memory

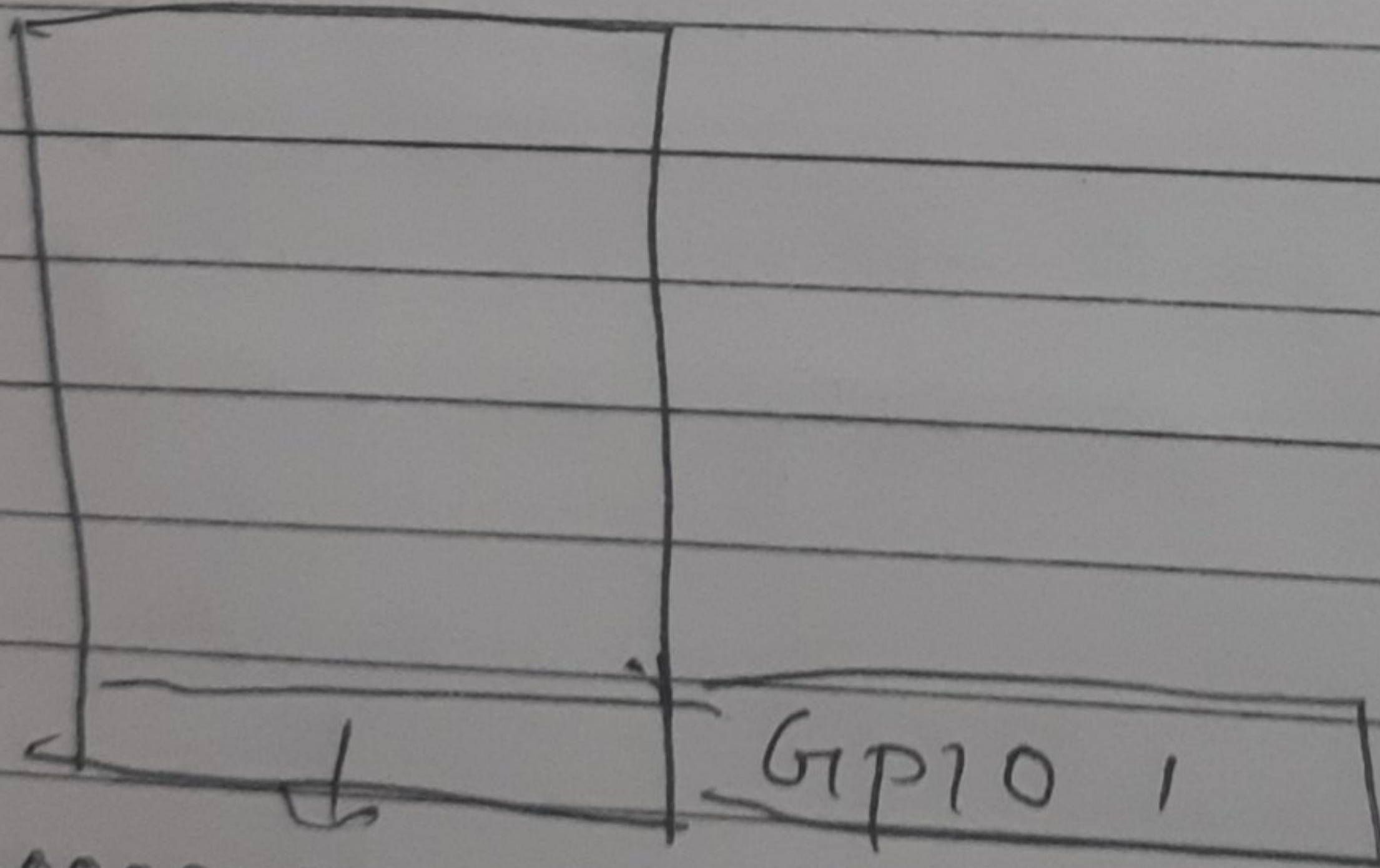
The peripherals is created memory space within certain boundaries

0x0000 0000

GPIOA Address is allocated between

0x4002 0000 - 0x4002 03FF

GPIO



0x0000 0000

0x04002 0000 to 0x4002 03FF

8 byte

end

offset ← base



In physical memory For 1 bit  
there is 8 bits

So 4

byte  
address

decimal

0	→	0000
1	→	0001
2	→	0010
3	→	0011
4	→	1000
5	→	1001
6	→	1100
7	→	1101
8	→	1000
9	→	1001

0X F123

1111, 0001, 0010, 0001 → binary

F 1 2 3 → hexadecimal

Base      offset      Memory address  
starts at

20	10	30
20	5.5	25.5

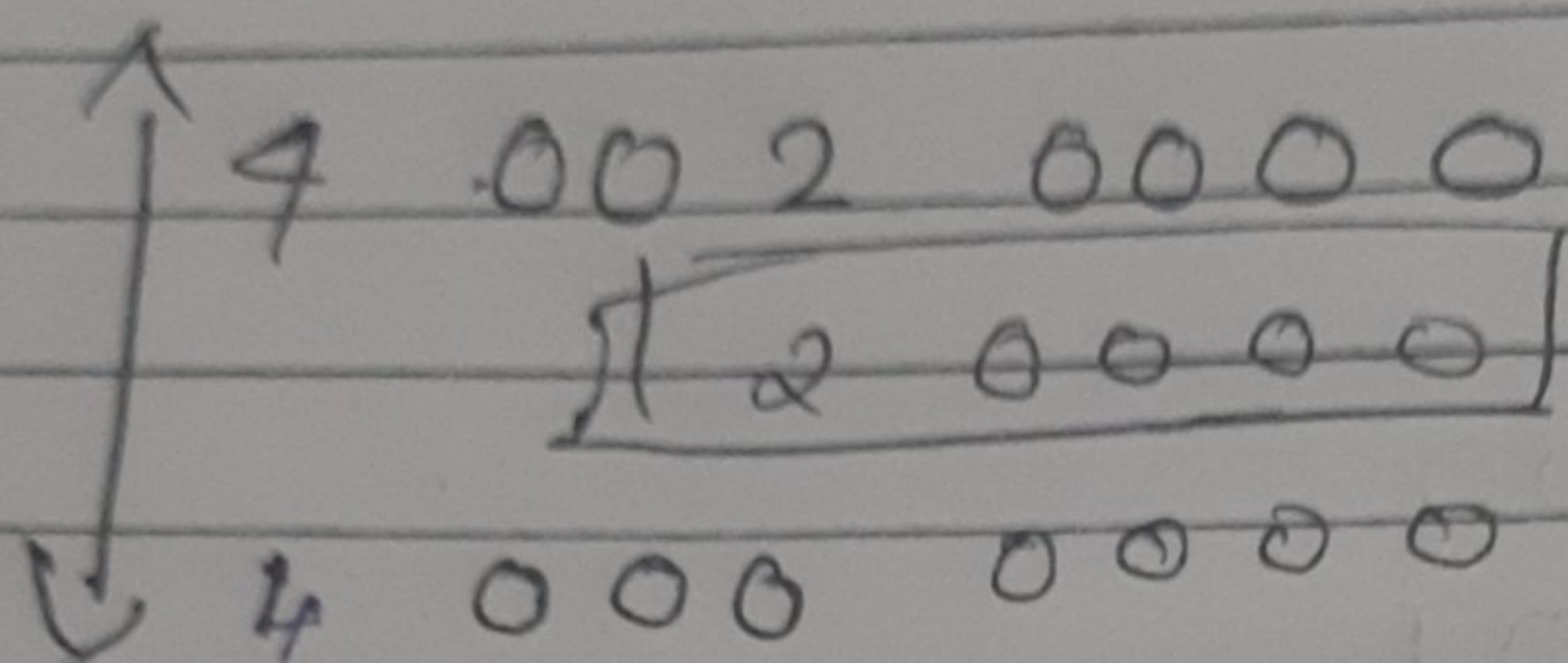
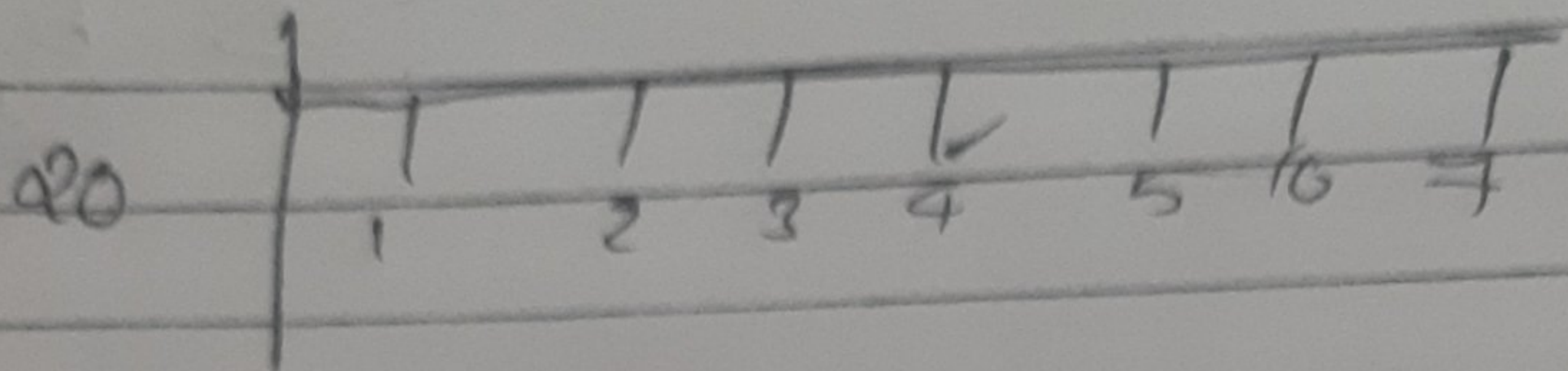




DATE: / /

base.  
(0x40000000)

offset  
(0x00020000)



subtract  
starting and  
ending value.