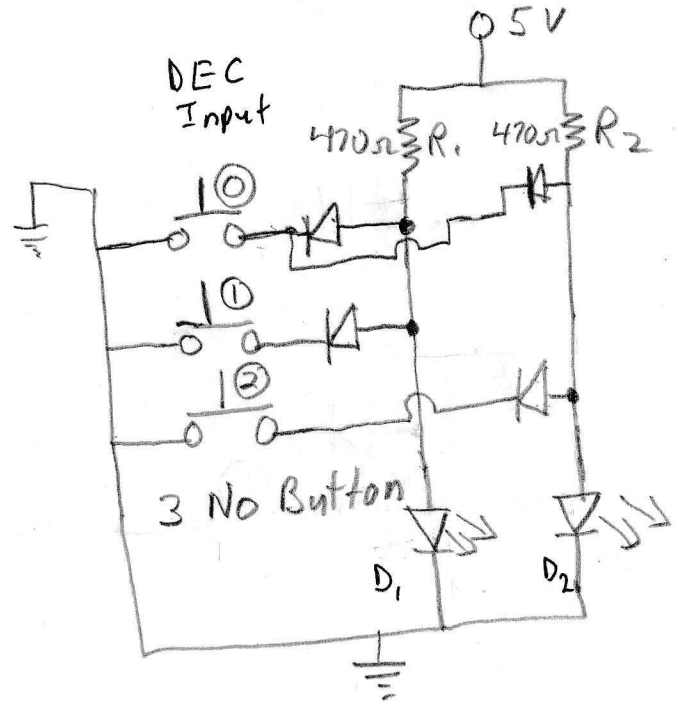


①

(2 bit) Decimal to Binary Encoder

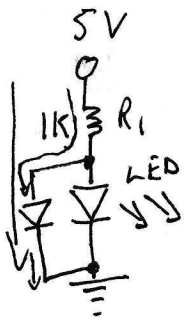


Truth Table

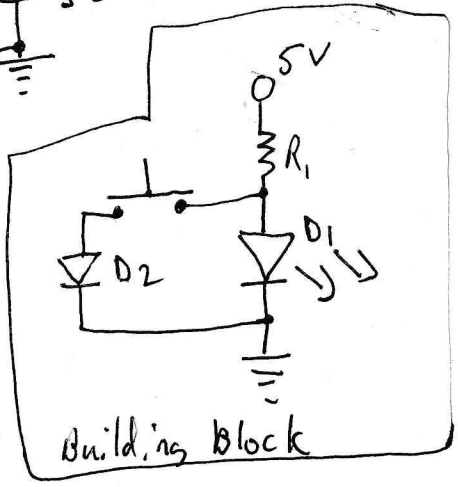
DEC	BIN
0	00
1	01
2	10
3	11

5V = 1 = Light ON
 0V = 0 = Light OFF

Initial State = 11

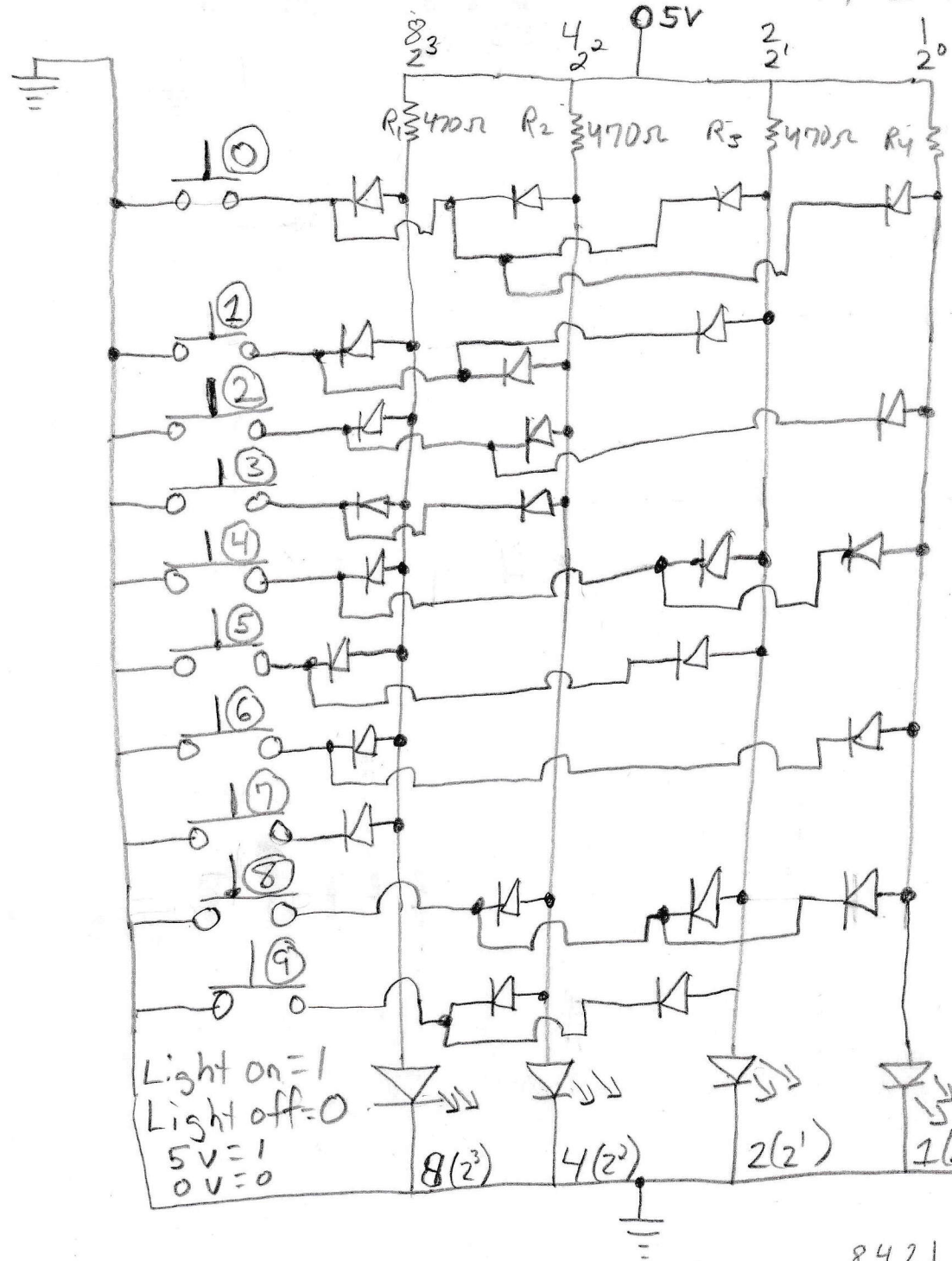


0 = Light off
 1 = Light on



(2)

Rich's version of the Decimal to Binary Encoder (4bit)



TRUTH TABLE

IN	OUT
0	0000
1	0001
2	0010
3	0011
4	0100
5	0101
6	0110
7	0111
8	1000
9	1001

Light on = 1
 Light off = 0
 5V = 1
 0V = 0

8421
 1111
 8+4+2+1 = 15
 DEC = 15
 HEXADESIMAL = F

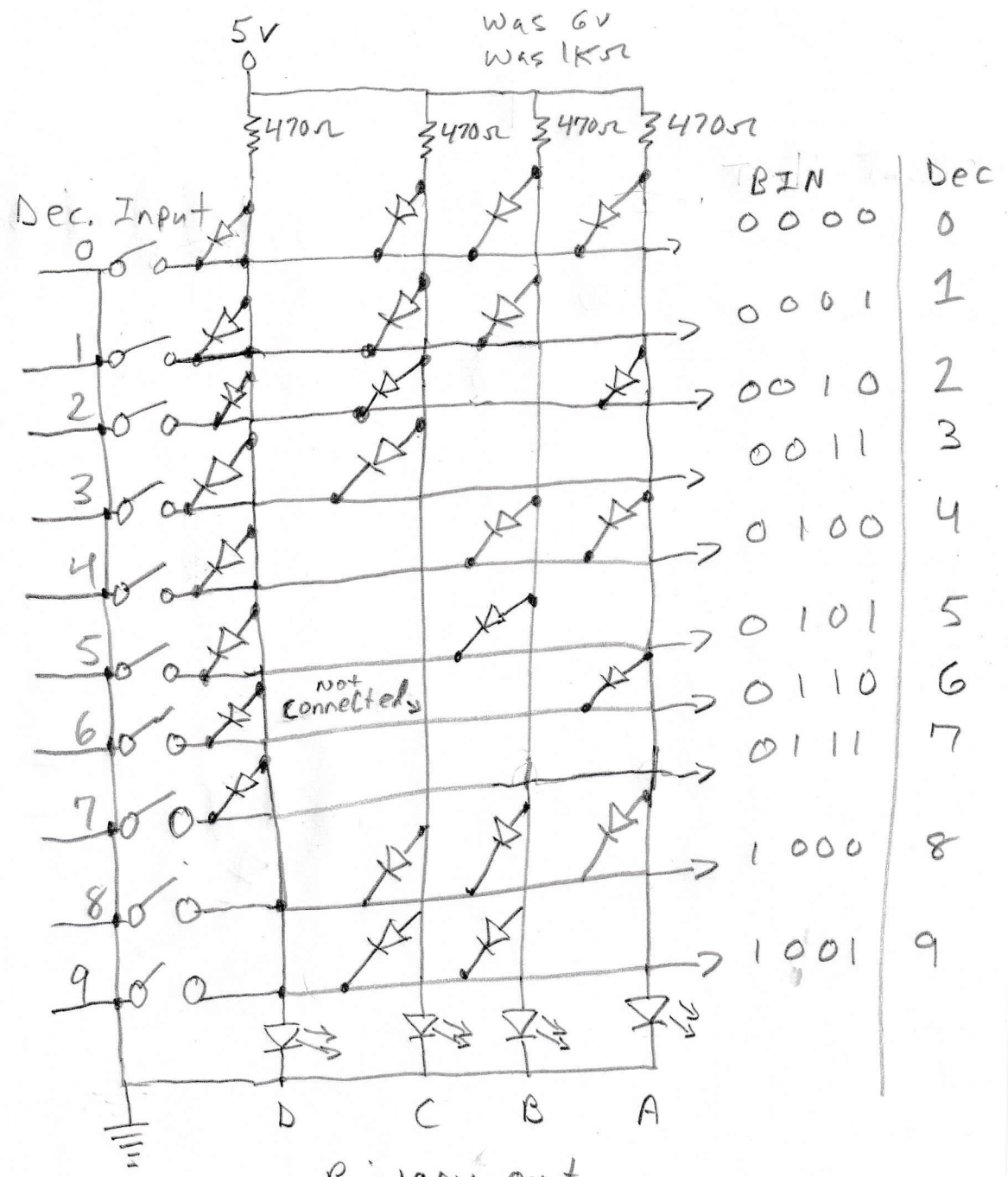
Decimal To Binary Encoder

Courtesy of Forest M. Mims III
 Engineer's Mini-Notebook
 Fourth printing 1993

0	4	10
2 ³	2 ²	2 ¹ 2 ⁰
D	C	B A
0	0	0 0
0	0	0 1
0	0	1 0
0	0	1 1
0	1	0 0
0	1	0 1
0	1	1 0
0	1	1 1
1	0	0 0
1	0	0 1

Binary outputs

only 1 decimal switch can be closed at a time!



Dec	BIN
0	0000
1	0001
2	0010
3	0011
4	0100
5	0101
6	0110
7	0111
8	1000
9	1001

Binary out
 1 = LED ON
 0 = LED OFF

(4)

Bible Verse

Romans 15:13

"Now the God of hope fill you with all joy and peace in believing, that ye may abound in hope, through the power of the Holy Ghost."