Lab1\_2021\_JT January 24, 2021 1:42 AM

1. Truth Table 7+8=15 => 2159 Digit to OUT

			Digit to
	F	G	display
1	1	1	1
0	1	0	2
1	0	0	5
1	0	0	9

B=X.Y < = X'Y'

Z. 
$$Minterns:$$

$$A = X.Y$$

$$B = X.Y'$$

$$C = X'.Y'$$

$$D = X'.Y$$

$$E = X'.Y + X.Y' + X.Y$$

$$A = X.Y$$

$$B = X.Y'$$

$$C = X.Y'$$

$$D = X.Y$$

$$E = X.Y + X.Y' + X.Y$$

$$F = X.Y + X.Y'$$

$$B = X.Y'$$

$$C = X'.Y'$$

$$D = X'.Y$$

$$E = X'.Y + X.Y' + X.Y'$$

$$F = X'.Y + X'.Y'$$

$$G = X'.Y$$

$$C = X'.Y'$$

$$D = X'.Y$$

$$E = X'.Y + X.Y' + X.Y$$

$$F = X'.Y + X'.Y'$$

$$G = X'.Y$$

$$C = X'.Y'$$

$$D = X'.Y$$

$$E = X'.Y + X.Y' + X.Y$$

$$F = X'.Y + X'.Y'$$

$$G = X'.Y$$

$$A = D = G = X'.Y$$

C = X'Y' = (X+T)'

E=X+Y (using maxterms)

F = X!Y+X!Y = X!(Y+Y) = X'

5. (iruit (All NAND Gates):

B=X.Y

4. Cravit:

$$C = X'Y'$$

$$D = X'Y$$

$$E = X'Y + XY' + XY'$$

$$F = X'Y + X'Y'$$

$$G = X'Y$$

$$C = X'.Y'$$
 $D = X'.Y$ 
 $E = X'.Y + X.Y' + X.Y$ 
 $F = X'.Y + X'.Y'$ 
 $G = X'.Y$ 
 $G = X'.Y$ 
 $G = X'.Y$ 

$$C = X'.Y'$$

$$D = X'.Y$$

$$E = X'.Y + X.Y' + X.Y$$

$$F = X'.Y + X'.Y'$$

$$G = X'.Y$$

$$G = X'.Y$$

$$B = X.Y$$
 $C = X'.Y'$ 
 $D = X'.Y$ 
 $E = X'.Y + X.Y' + X.Y$ 
 $F = X'.Y + X'.Y'$ 
 $G = X'.Y$ 
 $G = X'.Y$ 

$$G = X.T$$

$$C = X'.Y'$$

$$D = X'.Y$$

$$E = X'.Y + X.Y' + X.Y$$

$$F = X'.Y + X'.Y'$$

$$G = X'.Y$$

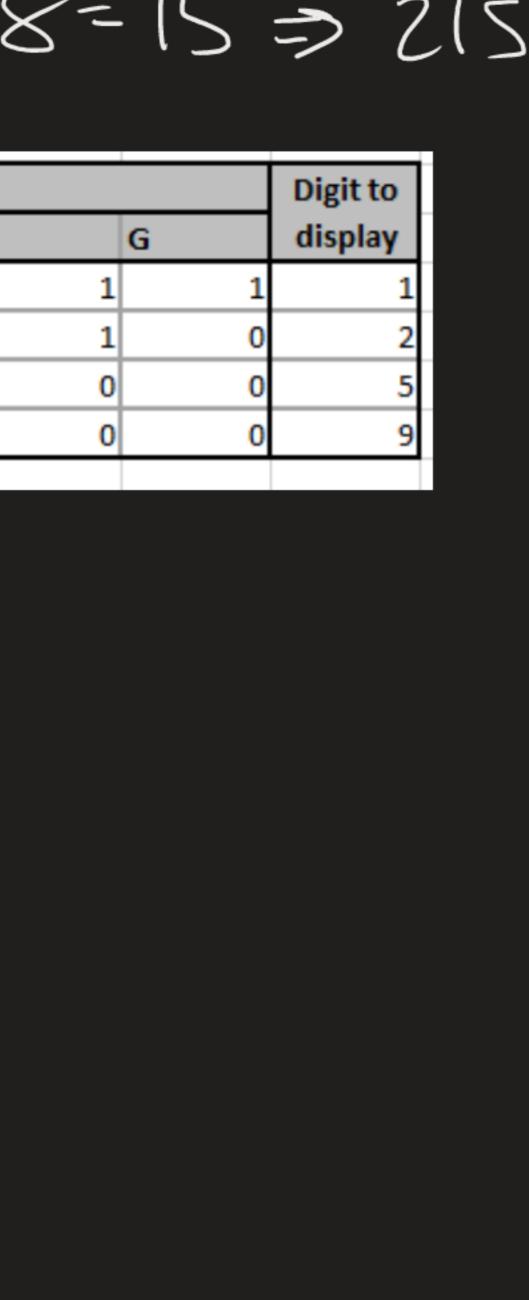
$$G = X'.Y$$

$$G = X'.Y$$

$$C = X'.Y'$$
 $D = X'.Y'$ 
 $E = X'.Y + X.Y' + X.Y'$ 
 $F = X'.Y + X'.Y'$ 
 $G = X'.Y'$ 
 $G = X'.Y'$ 

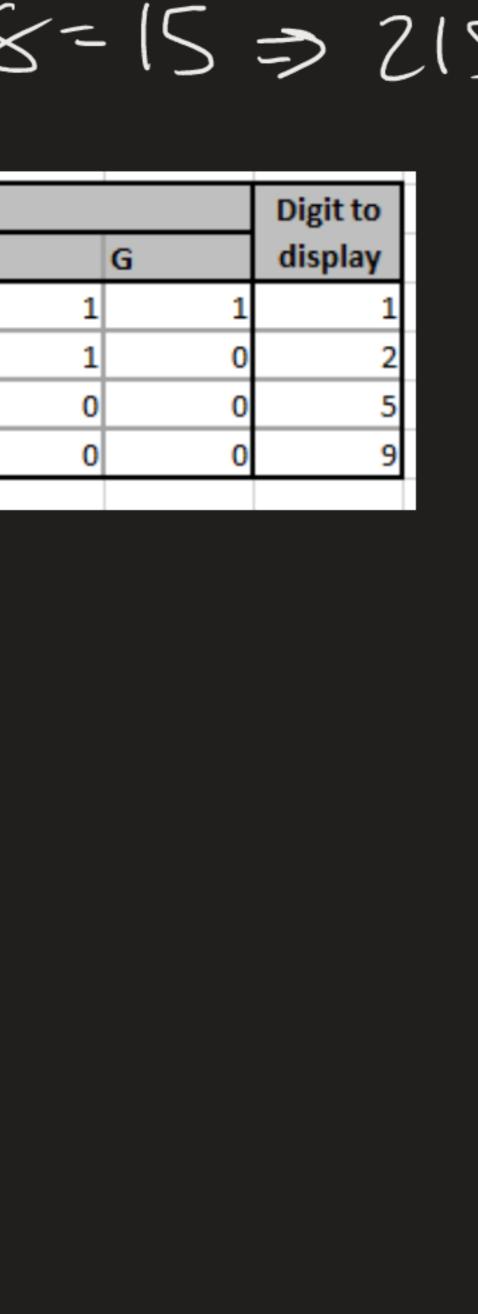




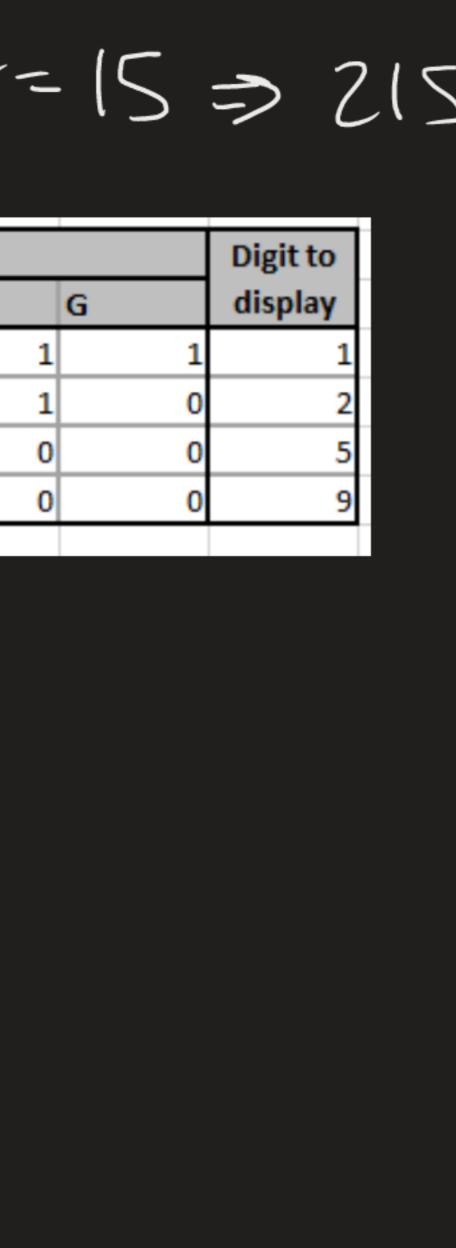


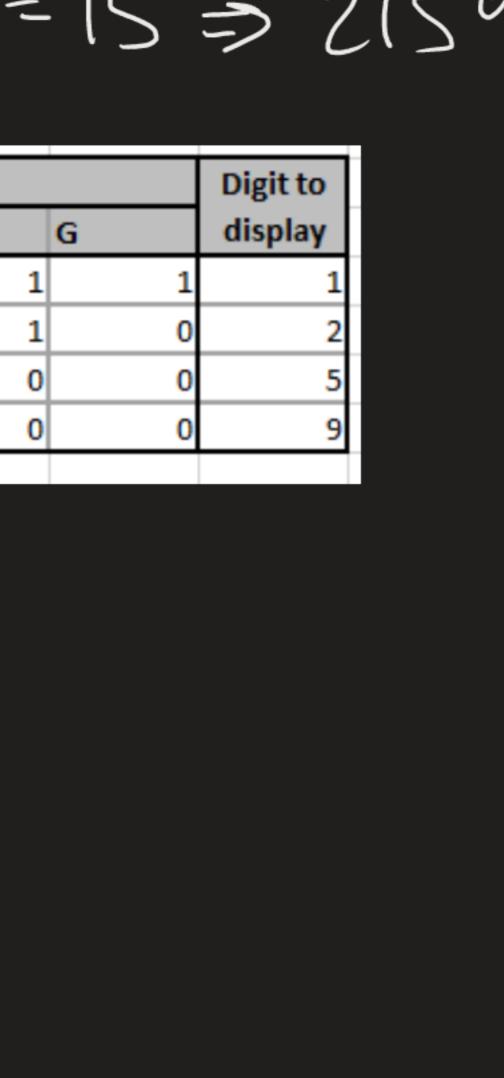


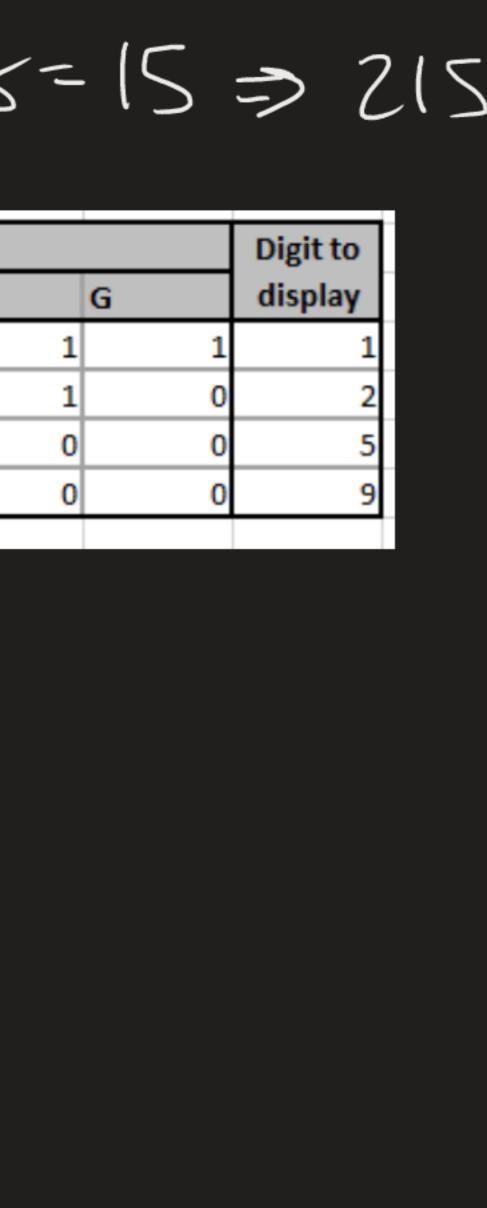


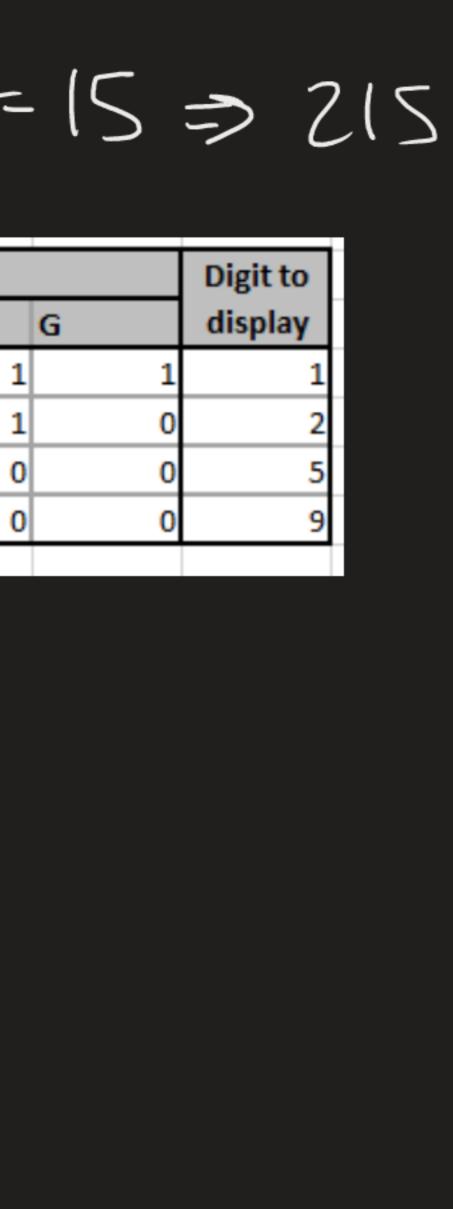


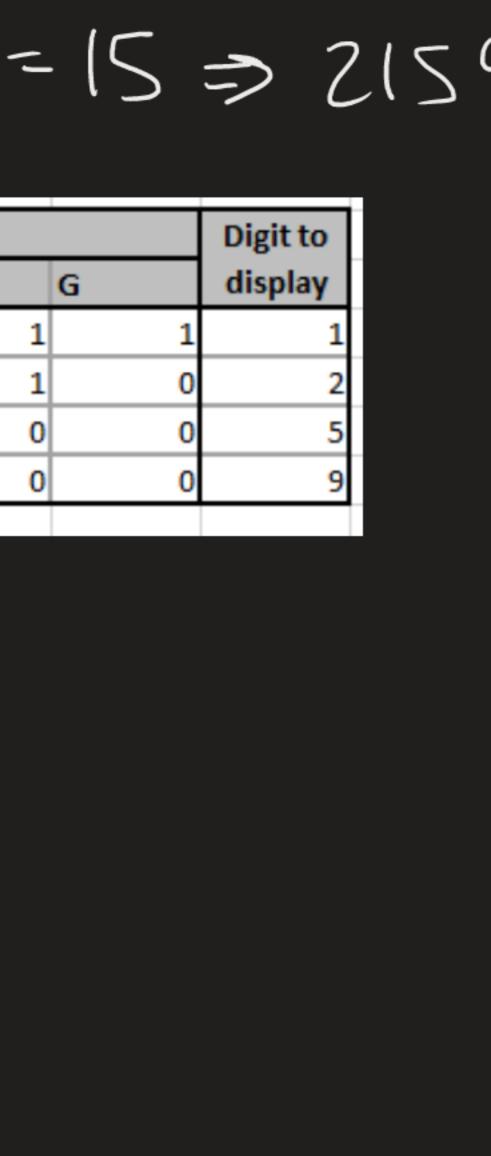


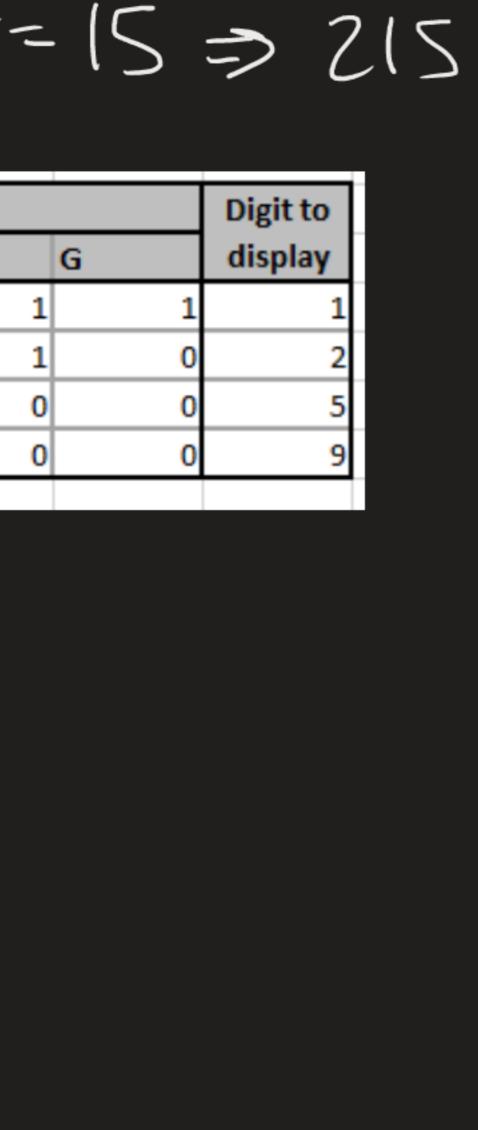


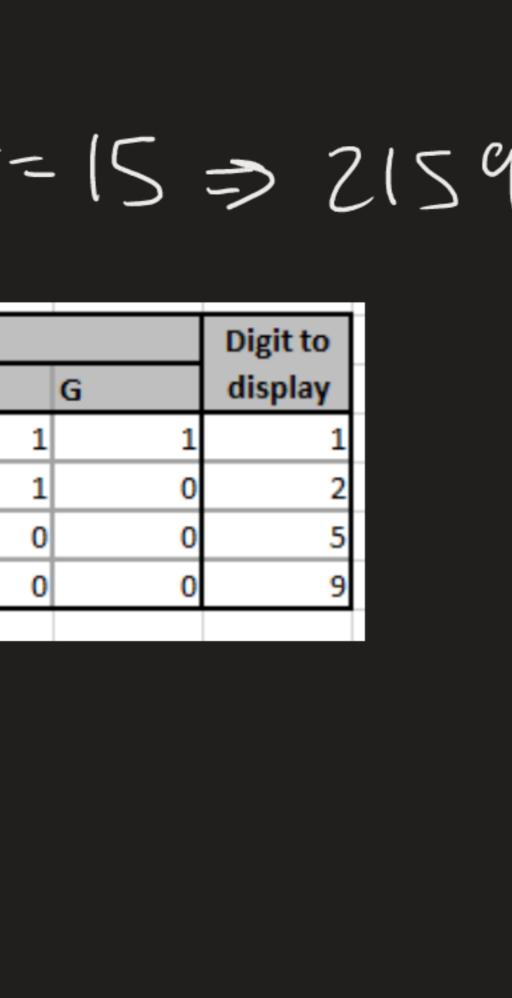


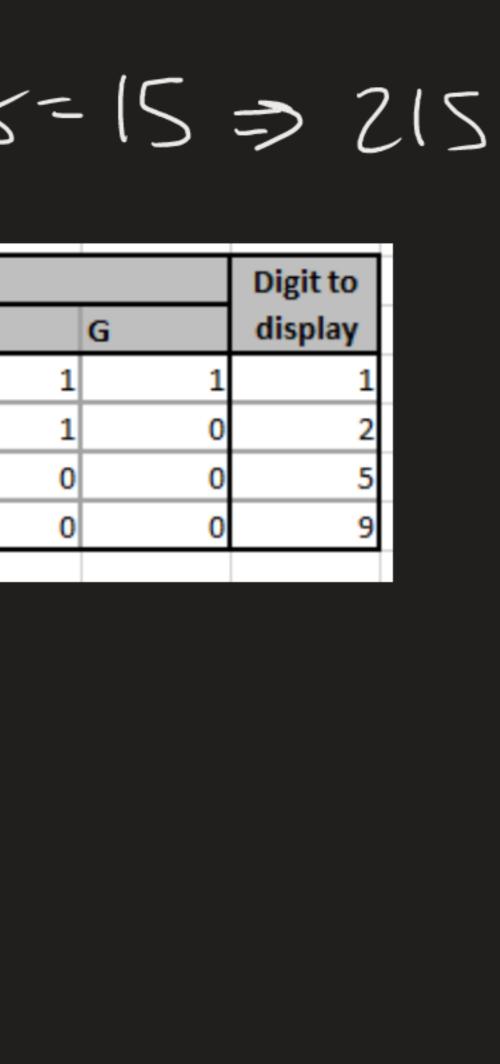


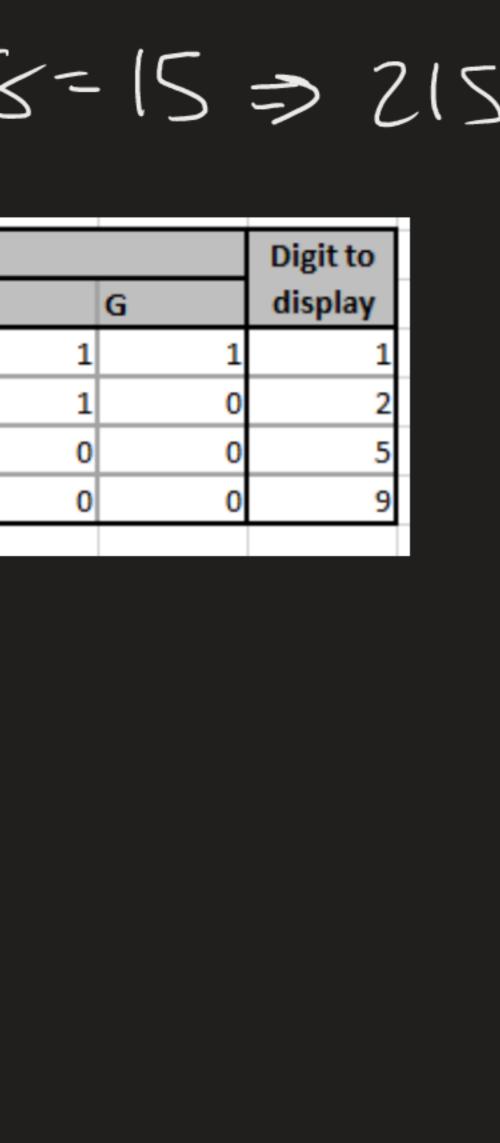


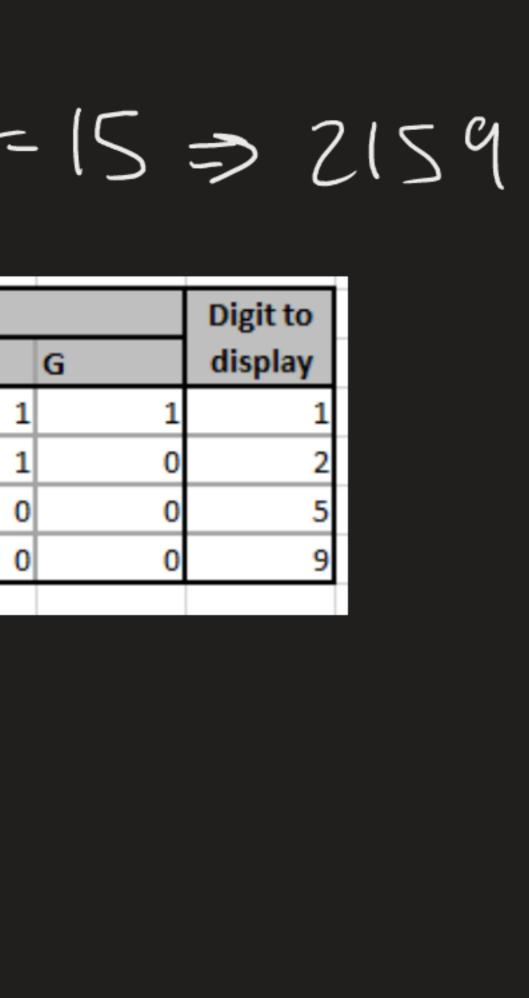


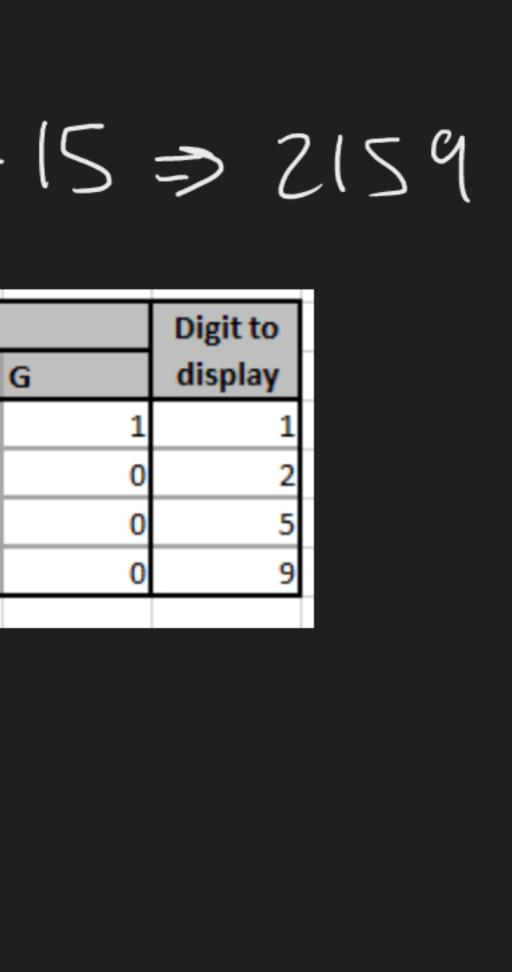


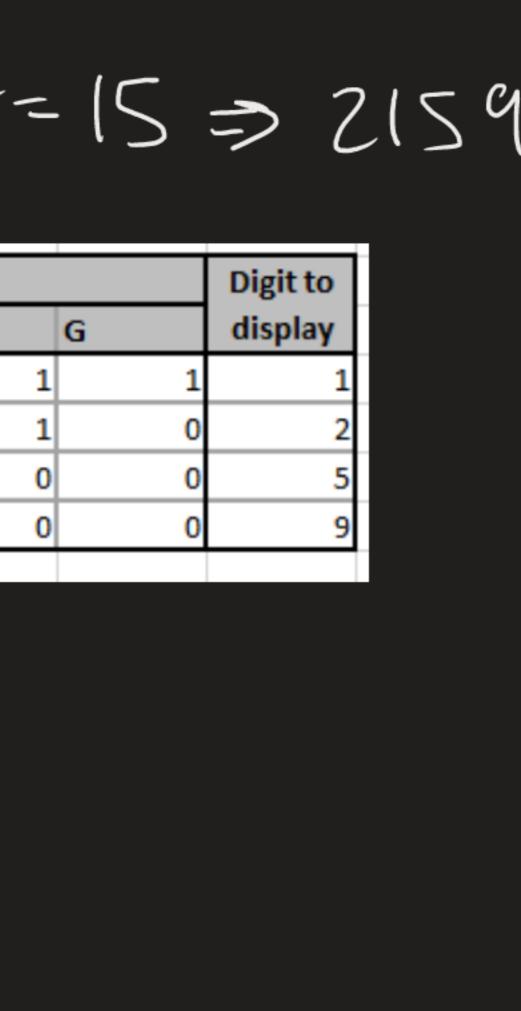


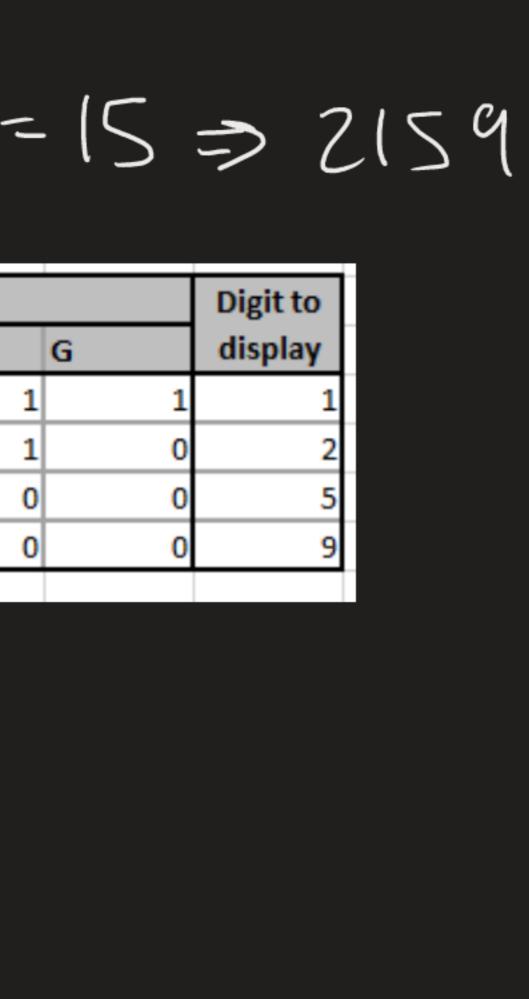


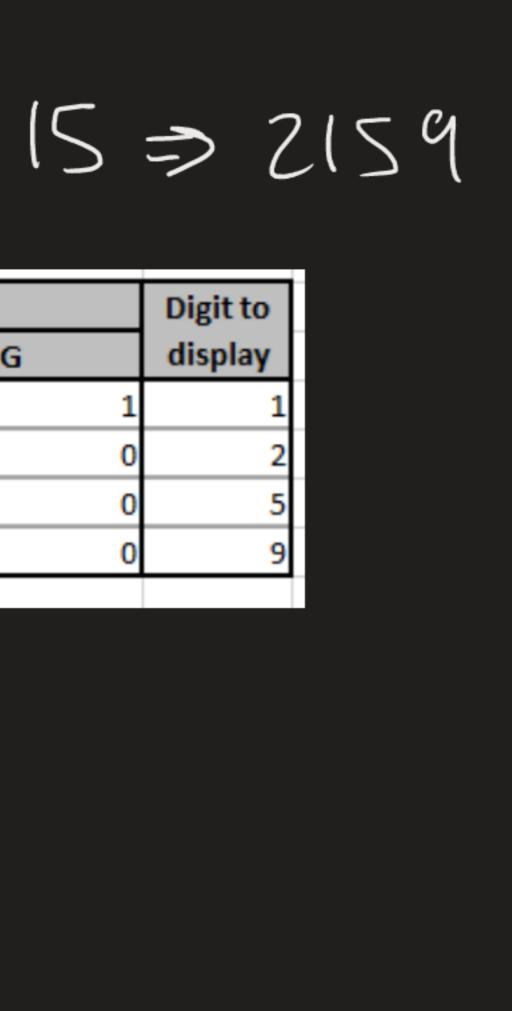


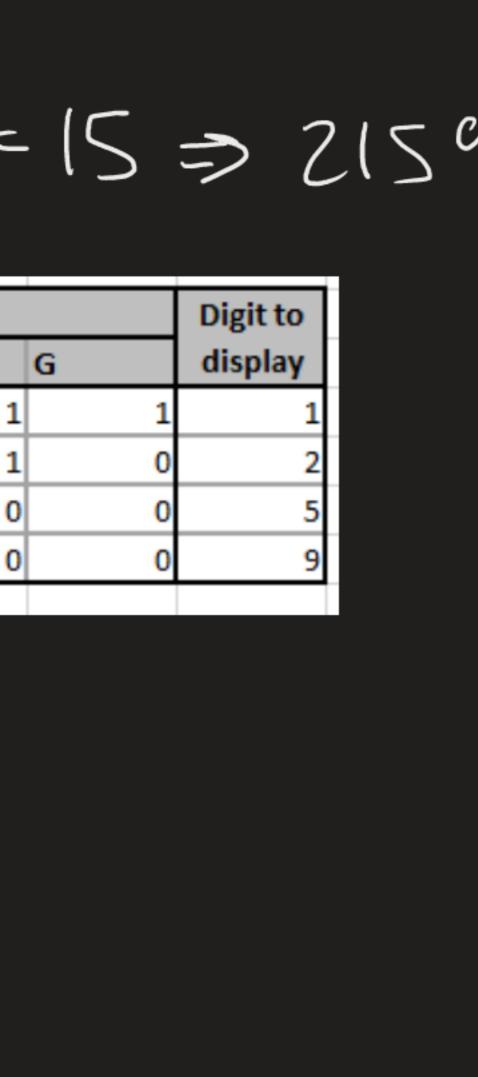


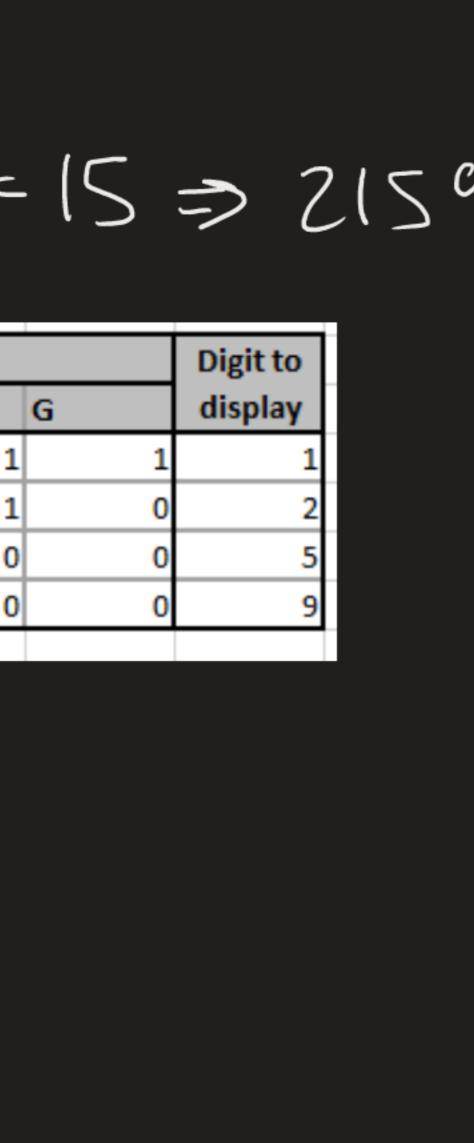


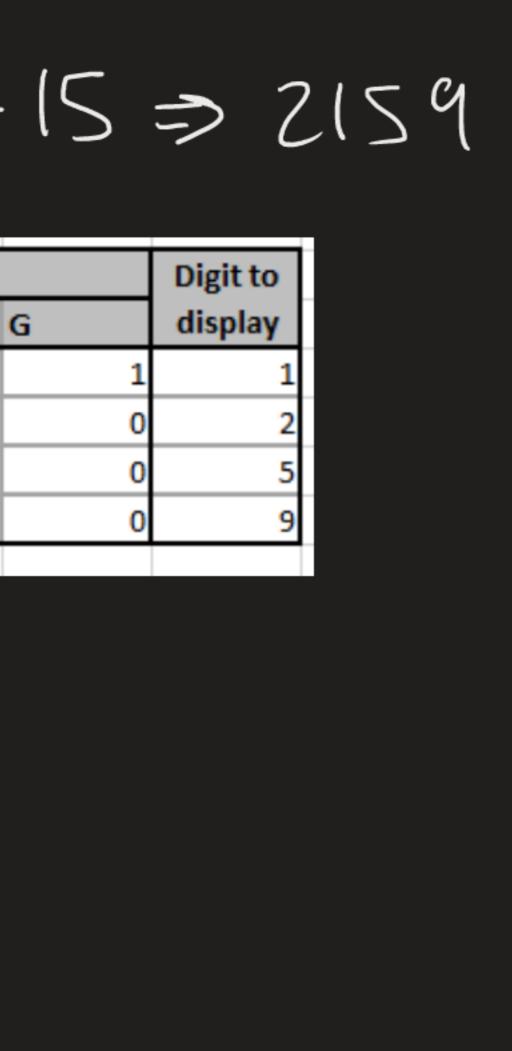


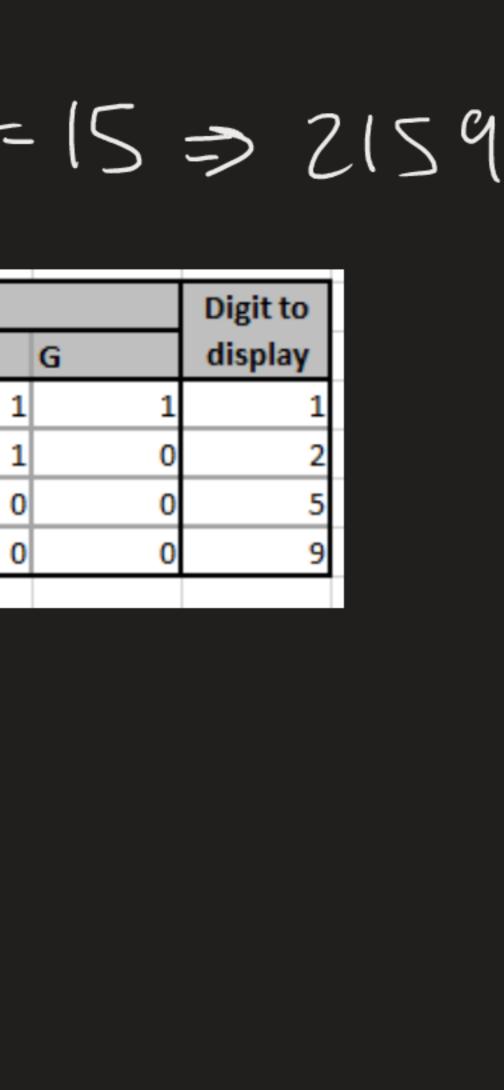


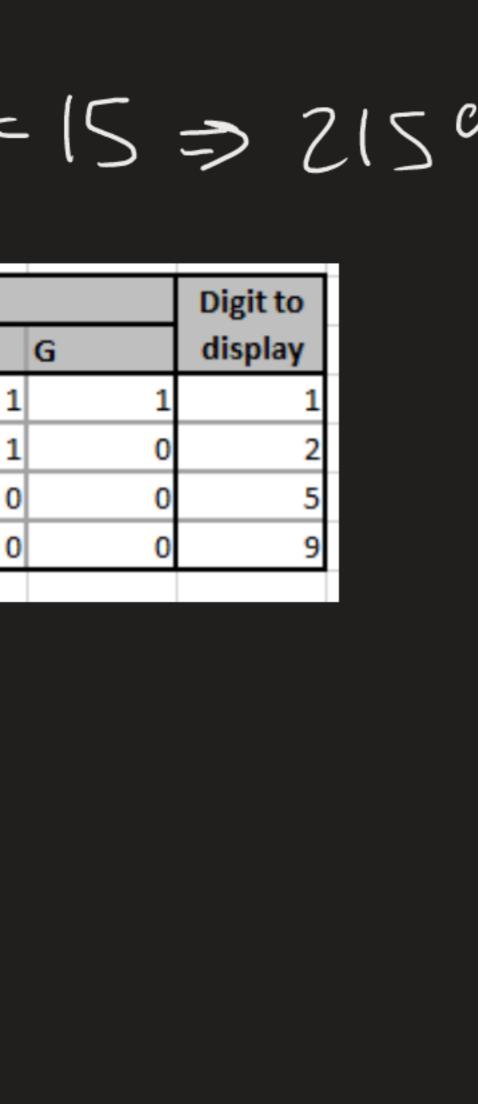


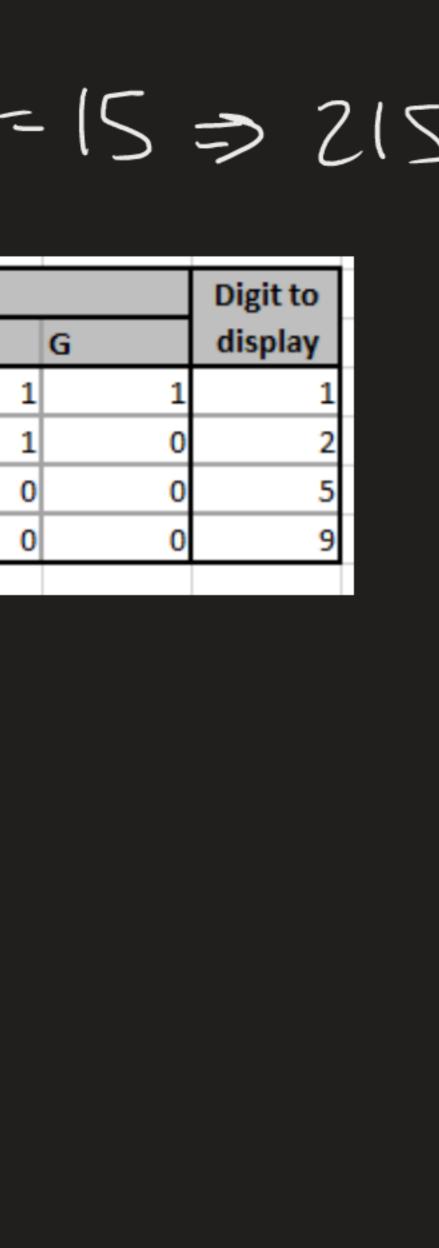


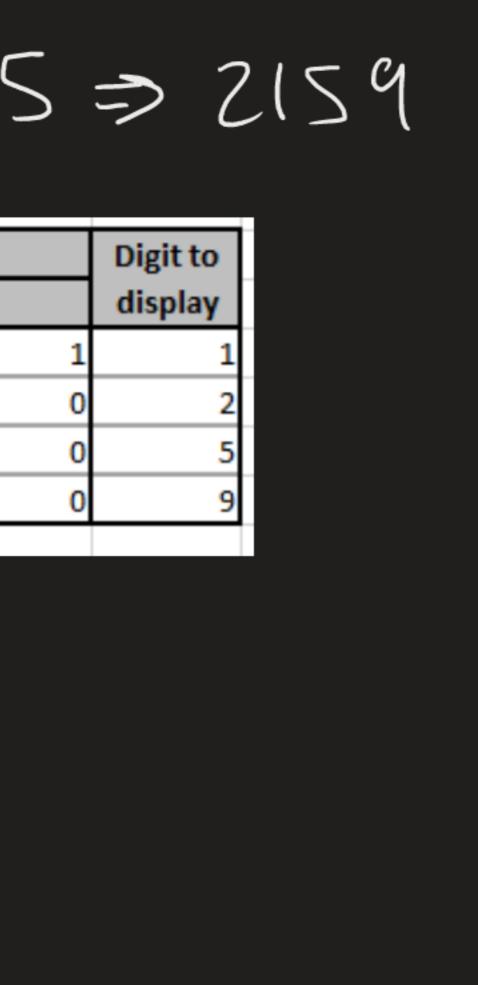












A = () = (n

