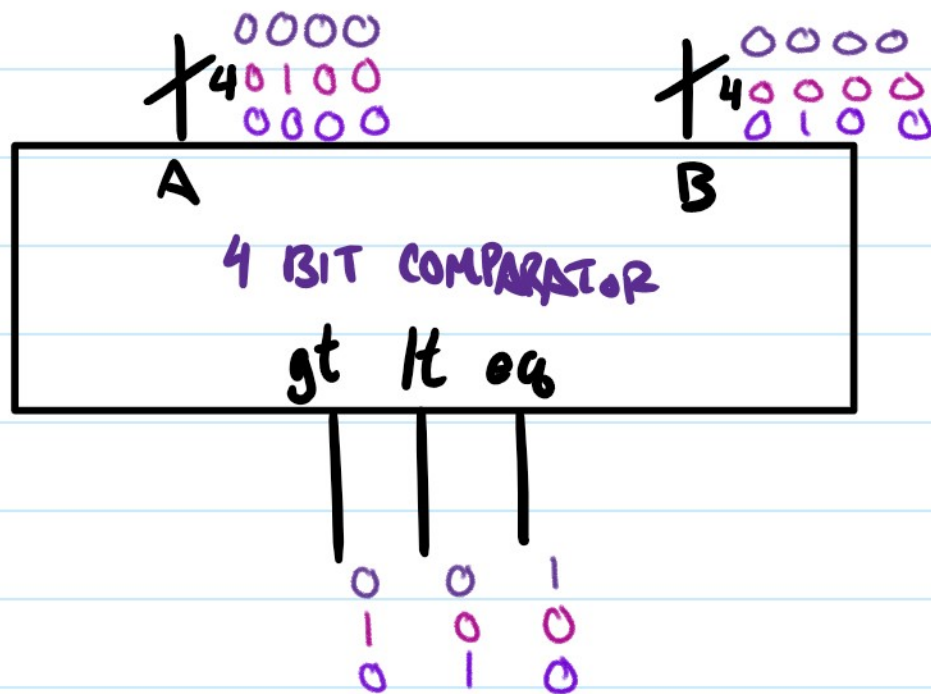


## Section 2 - Components - Comparator

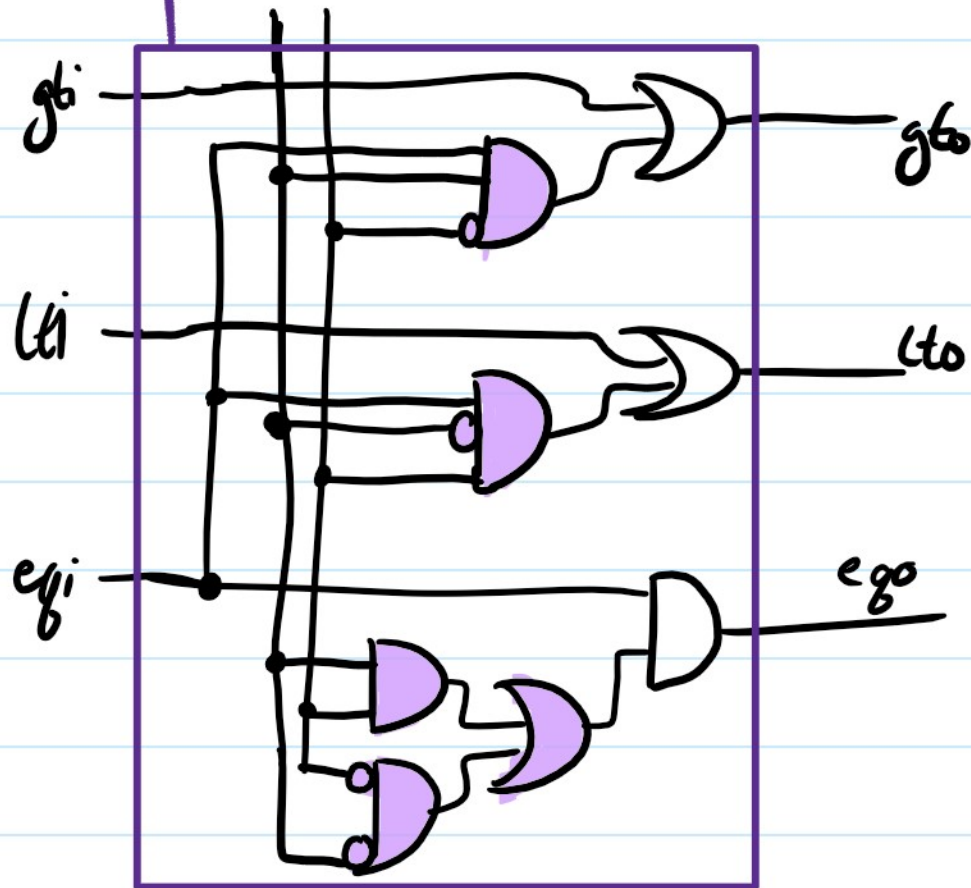
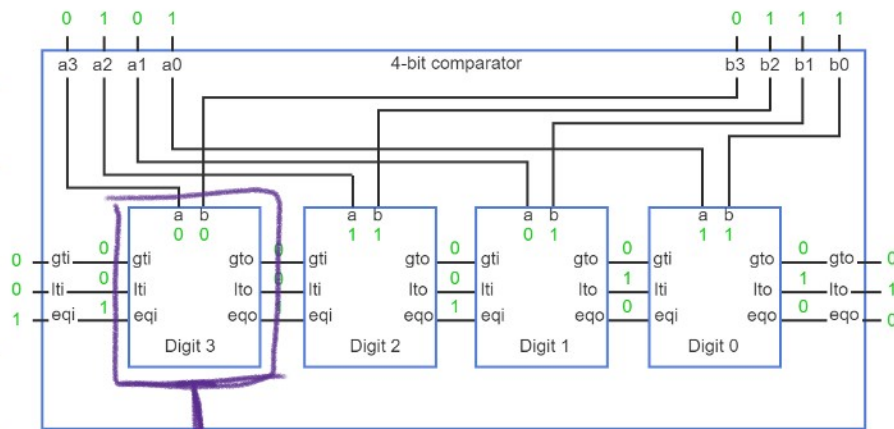
Wednesday, June 19, 2019 12:40 PM

# COMPARATOR

COMPARATOR - COMPARES 2 numbers  
- RETURNS IF  $>$ ,  $<$ ,  $=$



$a$ $b$		gt	lt	eq
0	0	0	0	1
0	1	0	1	0
1	0	1	0	0
1	1	0	0	1



• eqi STARTS AS 1

• each bit is compared individually

• the HIGHLIGHTED GATES COMPARE THE  
BIT AND CHECK IF EQ1 IS  
SELECTED. THIS CHECKS IF ITS  
THE BASE CASE & CAN BE  
CHANGED