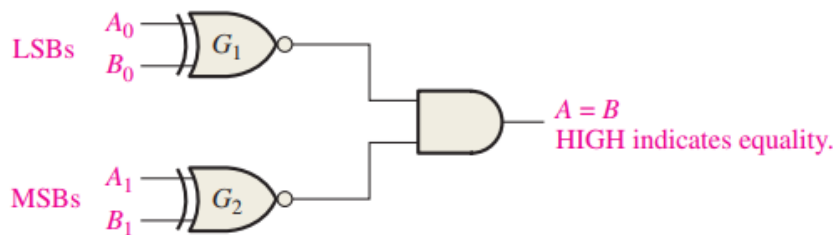# Lab Tasks

Lab Task#1:

    a) Design one-bit comparator Circuit on the Logic Works and develop truth table of it.

    b) Design two-bit comparator Circuit on the Logic Works and develop truth table of it.

Lab Task#2: Apply each of the following sets of binary numbers to the comparator inputs in the following Figure, and determine the output by following the logic levels through the circuit.

    a) 10 and 10

    b) 11 and 10

Implement on the Logic Works as well

Lab Task#3: Implement on the Logic Works using 74HC85, and determine the $A = B$, $A > B$, and $A < B$ outputs for the input numbers shown on the comparator in the following Figure:
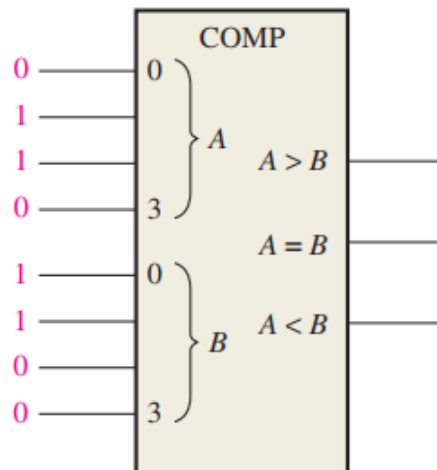
Lab Task#4: Use 74HC85 comparators to compare the magnitudes of two 8-bit numbers. Show the comparators with proper interconnections.