Learning Material - Experiment in ICT 2

Week 9

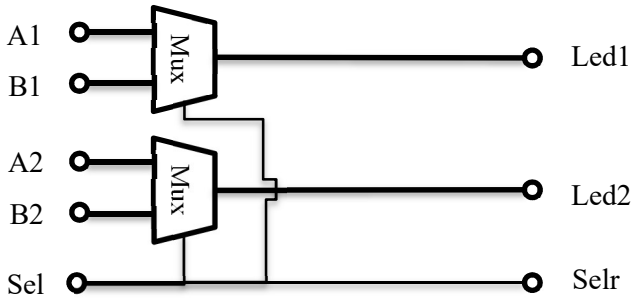
Goal of week

Student will be known about how to create a MUX, and use MUX to select data from 2 sources.

Content and requirement

Analyze Multiplexor, to design Multiplexor from OR, AND, NOT logic gate.

Analyze the basic schematic below, and draw detail schematic circuit and assemble it in breadboard.



- A and B are two 2-bit sources. Student should connect A[1:2], B[1:2] to 4 buttons (*with pull-down resistor and led*, *view "Appliance User Guide")*
- Sel is the selection signal. Student should plug Sel wire to the High voltage and Low voltage to make logic 0 and 1
- Led1, Led2, Selr wires are connected to Led to show values.

Experimental Equipment

1. Equipment Guideline
2. 5V Power
3. Breadboard x1
4. Multimeter x1
5. IC 74LS32 (OR) x1
6. IC 74LS08 (AND) x2
7. IC74LS04 (NOT) x1
8. Led x8
9. Resistor 330Ω x8
10. Button A1, B1, A2, B2 (or switch) x4

Experimental Steps

1. Analyze
2. Supply power and use multimeter test output state for each input conditions.

Experimental Report

All student must have a report, explain everything they does in this experiment with the content:

- Draw circuit's schematic.
- Inform all result getting from this experiment
- Give some remark