7/8/2021 INSTRUCTIONS Experiment to perform logic of Full Subtractor on kit POWER SWITCH Vcc 6A 6Y 5A 5Y 4A 4Y 14 13 12 11 10 9 8 Vcc 4B 4A 4Y 3B 3A 3Y Vcc 14 13 12 11 10 9 8 A B Y A B Y 14 13 12 11 10 9 8 14 13 12 11 10 9 8 **V**<sub>cc</sub>: +5**V 7432(ORGate)** 7486(XORGate) 7408(A) V A B Y A GND GND 7404 Hex Inverters 7408(ANDGate) 1 2 3 4 5 6 7 1A 1B 1Y 2A 2B 2Y GND 1 2 3 4 5 6 7 1A 1Y 2A 2Y 3A 3Y GND 7432 Quad 2 Input OR Input A GND =  $R_2$ : 330 ohm  $\lesssim$  $R_1$ : 330 ohm  $\gtrsim$ Difference (D) Bout LED2 LED1 TRUTH TABLE Add PRINT Serial No. INPUT A INPUT B Bin Difference (D) Bout GND 2 0 0 1 3 0 1 0 1 4 1 1 1 5 1 0 0 0 6 1 0 1 0 7 1 1 0 0 8 1 1 1 1 1

https://de-iitr.vlabs.ac.in/exp/half-full-subtractor/simulation/Simulator1.html

Full subtractor