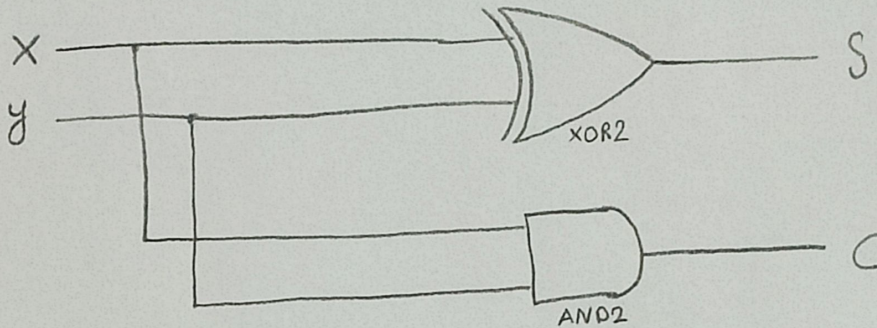
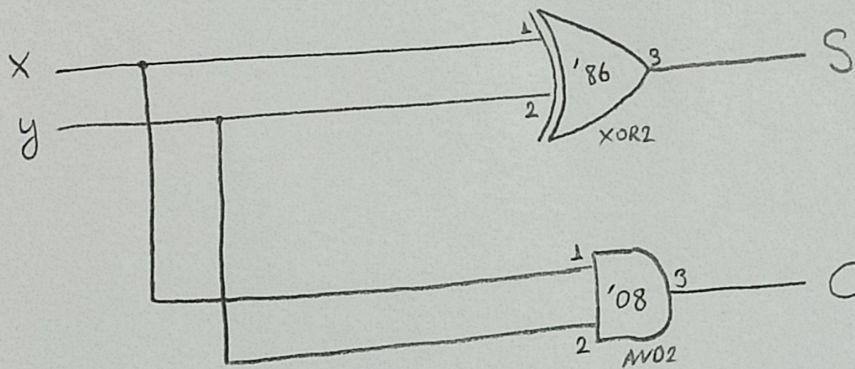


Half Adder

* Logic Diagram:



* Circuit Schematic:



* IC list:

- 1) One 74LS86 Quad 2-input XOR gate
- 2) One 74LS08 Quad 2-input AND gate

* 74LS86

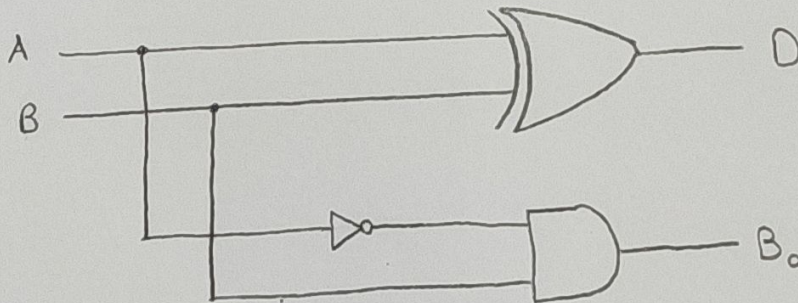
GND - 7
+5V - 14

* 74LS08

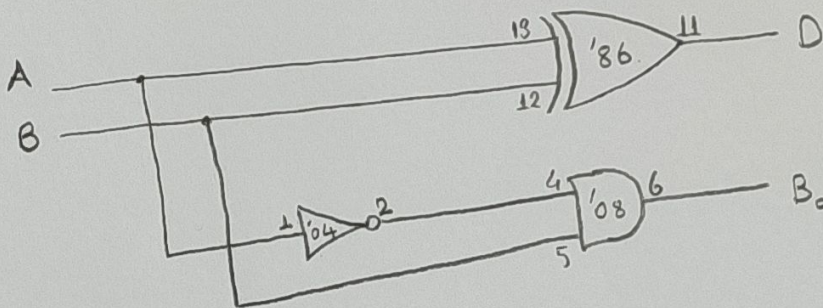
GND - 7
+5V - 14

Halt Subtractor

* Logic Diagram:



* Circuit Diagram:



* IC List

- 1) One 74LS04 HEX Inverting Gate
- 2) One 74LS08 Quad 2-input AND Gate
- 3) One 74LS86 Quad 2-input XOR Gate

* 74LS04

GND-7
+5V-14

* 74LS08

GND-7
+5V-14

* 74LS86

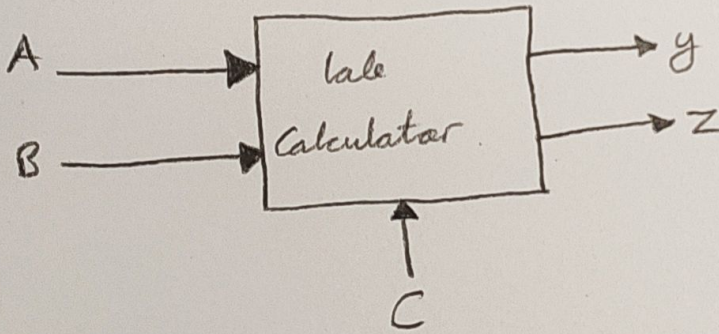
GND-7
+5V-14

lale Calculator

*

Control Input C	Function	Function	y	Z
0	A+B	H. Adder	Sum (S)	Carry out (Co)
1	A-B	H. Subtractor	Difference (D)	Borrow out (Bo)

*



Erdem Ege Eraylın
21601636