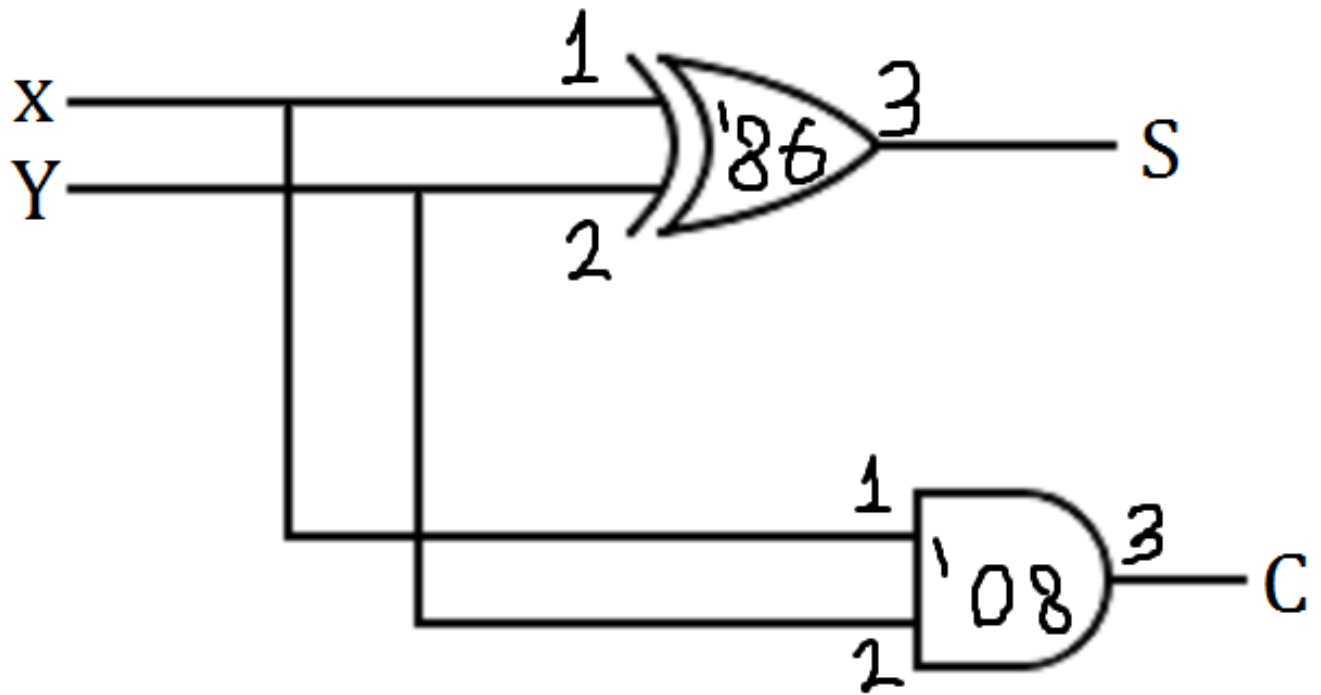


CS 223 Laboratory Assignment 1

Digital Circuits: Logic to Gates

Arda Önal 21903350 CS

Half Adder Circuit Schematic:



IC List

1. One 74LS08 Quad 2-input AND Gate
2. One 74LS86 Quad 2-input XOR Gate

74LS08

GND – 7

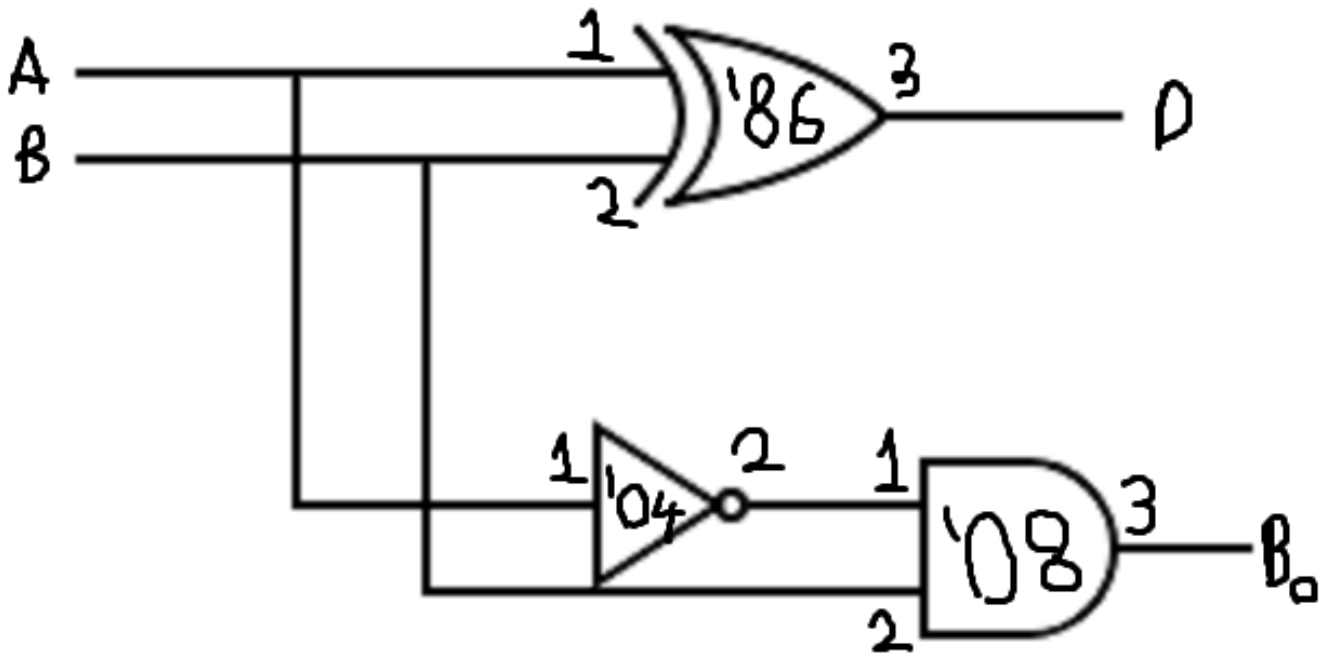
+5V – 14

74LS86

GND – 7

+5V – 14

Half Subtractor Circuit Schematic:



IC List

1. One 74LS08 Quad 2-input AND Gate
2. One 74LS86 Quad 2-input XOR Gate
3. One 74LS04 HEXInverting Gate

74LS08

GND – 7

+5V – 14

74LS86

GND – 7

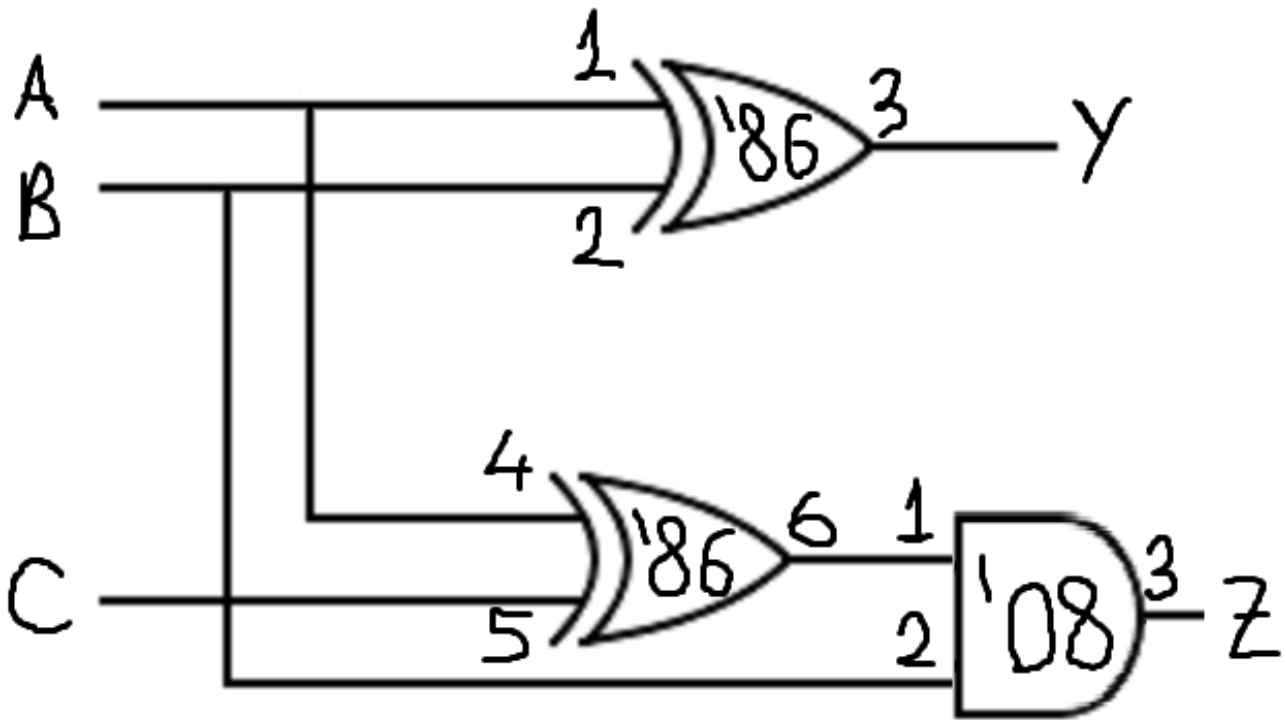
+5V – 14

74LS04

GND – 7

+5V – 14

Lab Calculator Circuit Schematic:



IC List

1. One 74LS08 Quad 2-input AND Gate
2. One 74LS86 Quad 2-input XOR Gate

74LS08

GND – 7

+5V – 14

74LS86

GND – 7

+5V – 14