

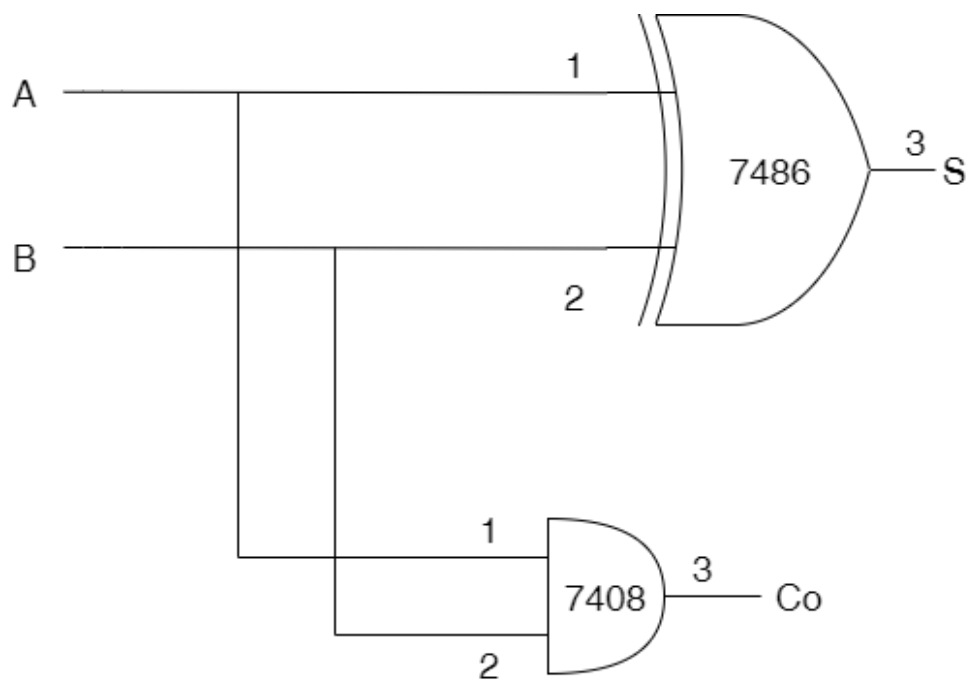
CS223 Laboratory Assignment 1

Digital Circuits: Logic to Gates

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Half Adder Circuit Schematic:



IC List:

- 1-) One 7486 quad 2-input XOR gate
- 2-) One 7408 quad 2-input AND gate

7486:

GND – 7

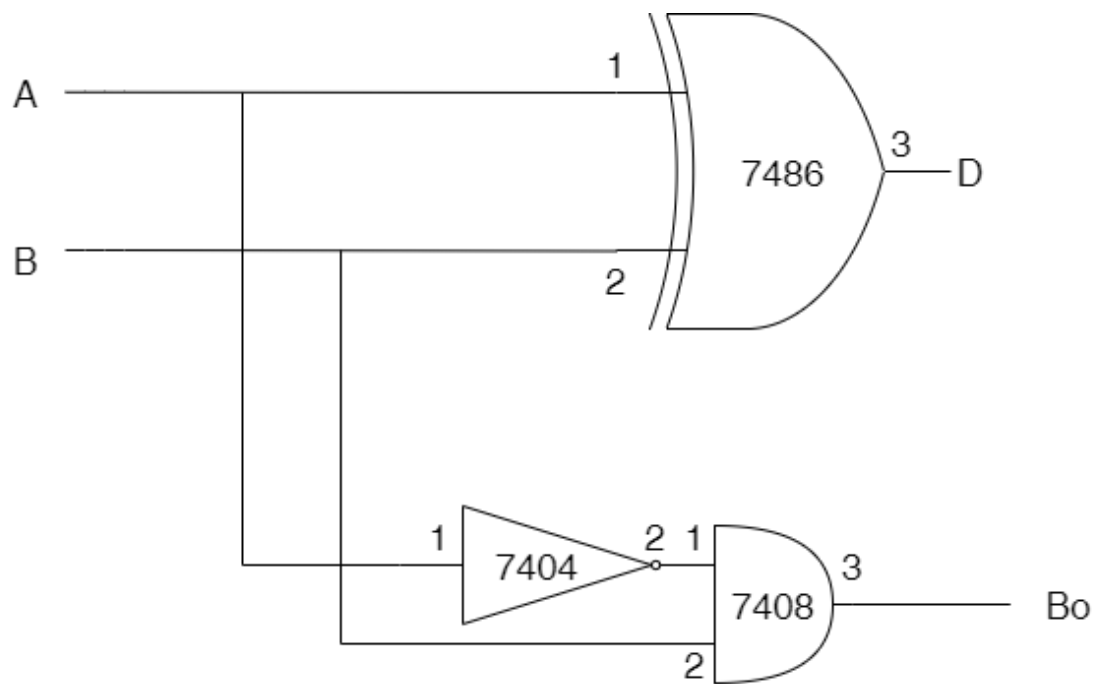
+5V – 14

7408:

GND – 7

+5V – 14

Half Subtractor Circuit Schematic:



IC List:

- 1-) One 7486 quad 2-input XOR gate
- 2-) One 7408 quad 2-input AND gate
- 3-) One 7404 six INVERTER gate

7486:

GND – 7

+5V – 14

7408:

GND – 7

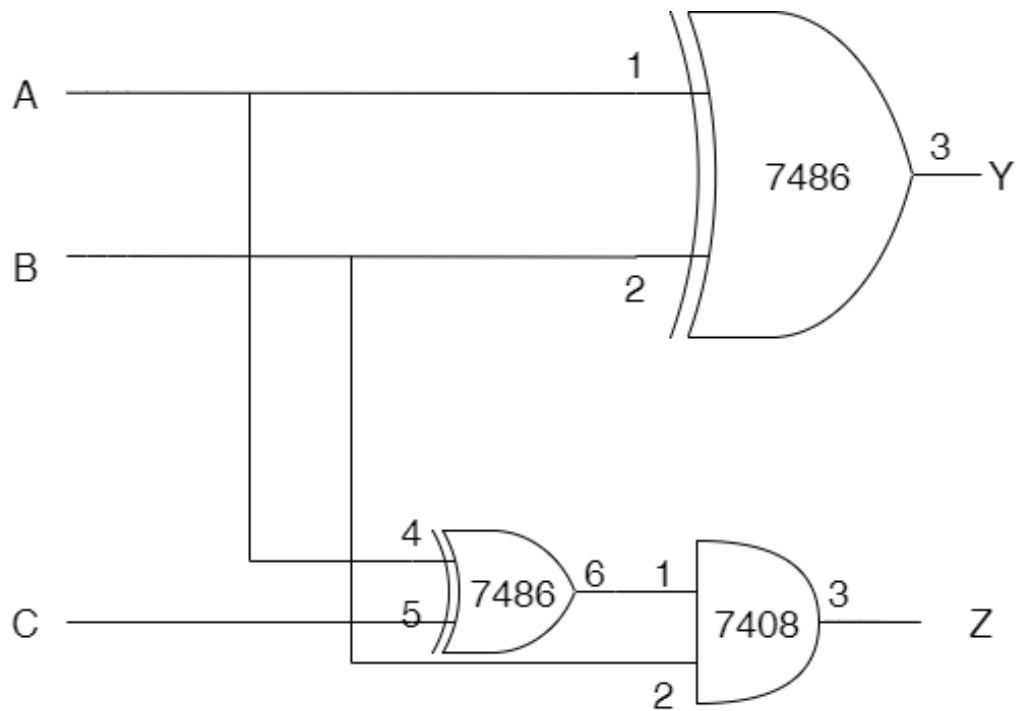
+5V – 14

7404:

GND – 7

+5V – 14

Lab Calculator Circuit Schematic:



IC List:

1-) One 7486 quad 2-input XOR gate

2-) One 7408 quad 2-input AND gate

7486:

GND – 7

+5V – 14

7408:

GND – 7

+5V – 14