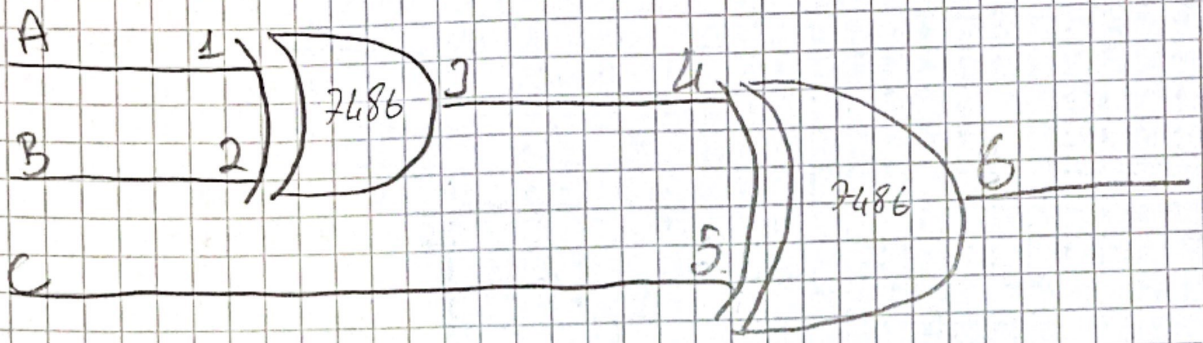
ARDA TAVUSBAY
21902222

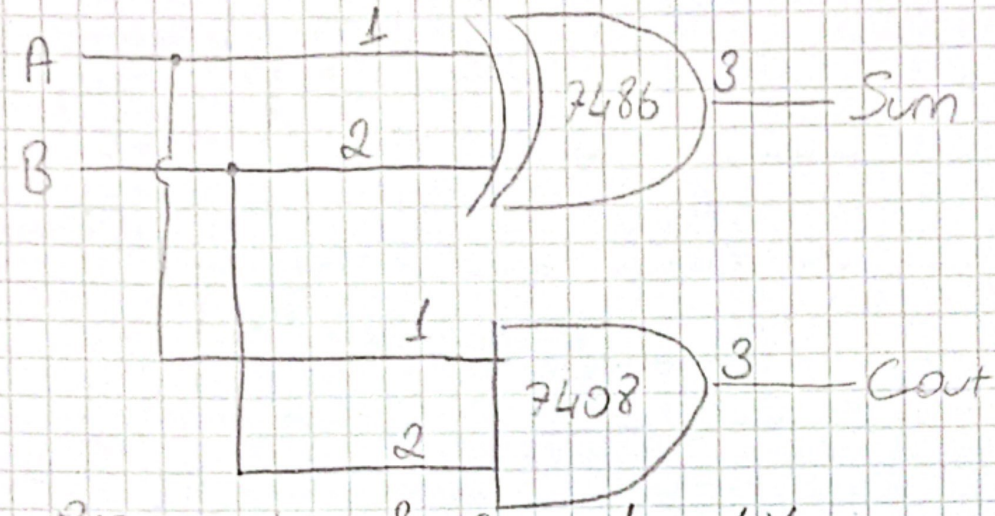
SCHEMATIC OF 3-INPUT XOR GATE USING 2-INPUT XOR GATES



⇒ One 7486 QUAD 2-Input XOR Gate
GND=7, V_{CC}=14.

ARDA TAVUSBAY
21902722

CIRCUIT SCHEMATIC OF HALF-ADDER



Pin numbers & Ground and V_{cc}

1-) 7408 AND GATE: V_{cc} - 14, Ground - 7

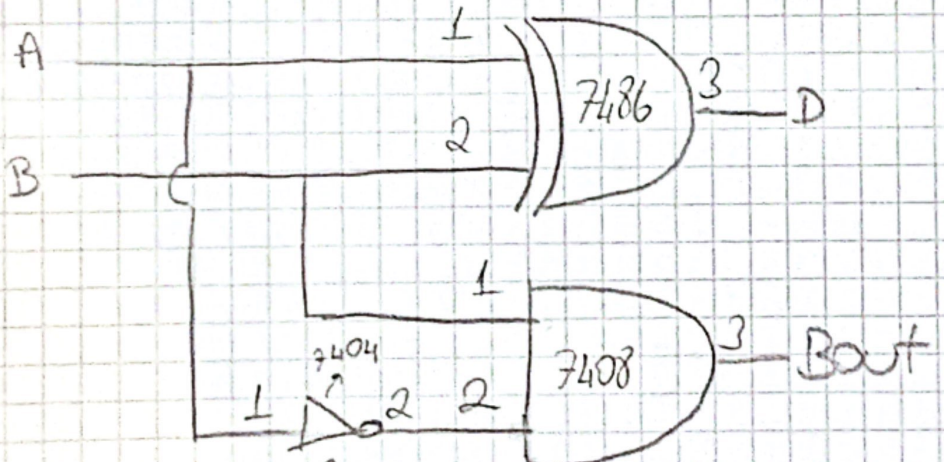
2-) 7486 XOR GATE: V_{cc} - 14, Ground - 7

IC's

1-) One 7408 QUAD TWO-INPUT AND GATE

2-) One 7486 QUAD TWO-INPUT XOR GATE

CIRCUIT SCHEMATIC OF HALF-SUBSTRACTOR



Pin Numbers & Ground and Vcc

1-) 7408 AND GATE: V_{cc}: 14, Ground: 7

2-) 7486 XOR GATE: V_{cc}: 14, Ground: 7

3-) 7404 HexInverting GATE: V_{cc}: 14, Ground: 7

IC's

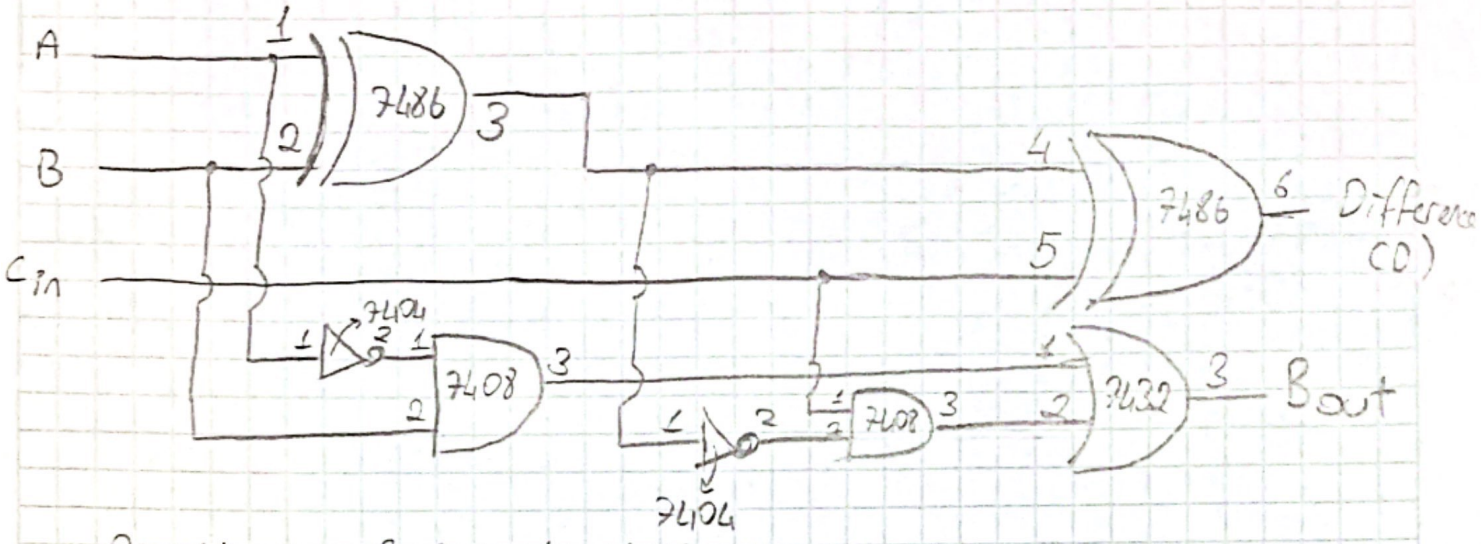
1-) One 7404 HexInverting GATE

2-) One 7408 QUAD TWO-INPUT AND GATE

3-) One 7486 QUAD TWO-INPUT XOR GATE

ARDA TAVUSBAY
21902722

CIRCUIT SCHEMATIC OF FULL SUBTRACTOR



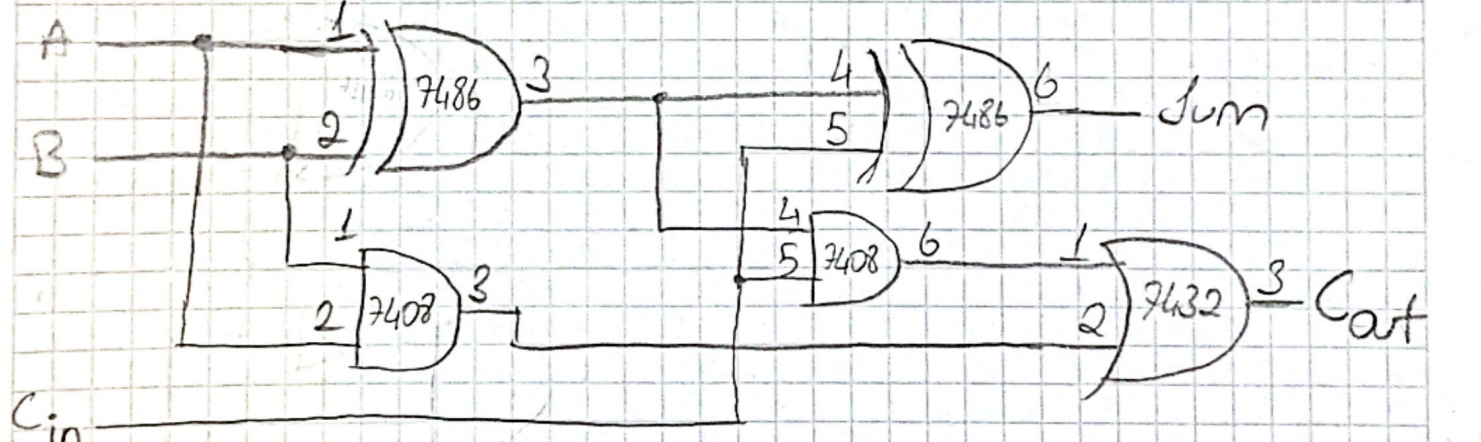
Pin Numbers & Ground and Vcc

1-) 7404 Hex Inverting Gate: Vcc: 14, Ground: 7
2-) 7408 AND Gate: Vcc: 14, Ground: 7
3-) 7432 OR Gate: Vcc: 14, Ground: 7
4-) 7486 XOR Gate: Vcc: 14, Ground: 7

IC's

1-) One 7404 Hex Inverting Gate 2) One 7408 QUAD 2-input AND Gate
3-) One 7432 QUAD 2-Input OR Gate 4-) One 7486 QUAD 2-input XOR Gate

CIRCUIT SCHEMATIC OF FULL ADDER



Pin Numbers & Ground and Vcc

1-) 7408 AND GATE: GND: 7, Vcc: 14 2-) 7432 OR GATE: GND: 7 Vcc: 14,
3-) 7486 XOR GATE: GND: 7, Vcc: 14

IC's

1-) One 7408 QUAD 2-input AND GATE
2-) One 7432 QUAD 2-input OR GATE
3) One 7486 QUAD 2-input XOR GATE