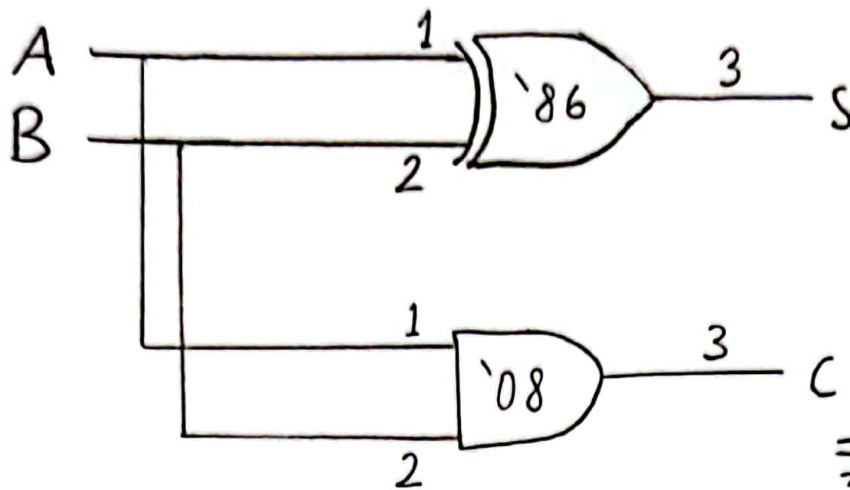


CS 223 Laboratory Assignment 1

Preliminary Work

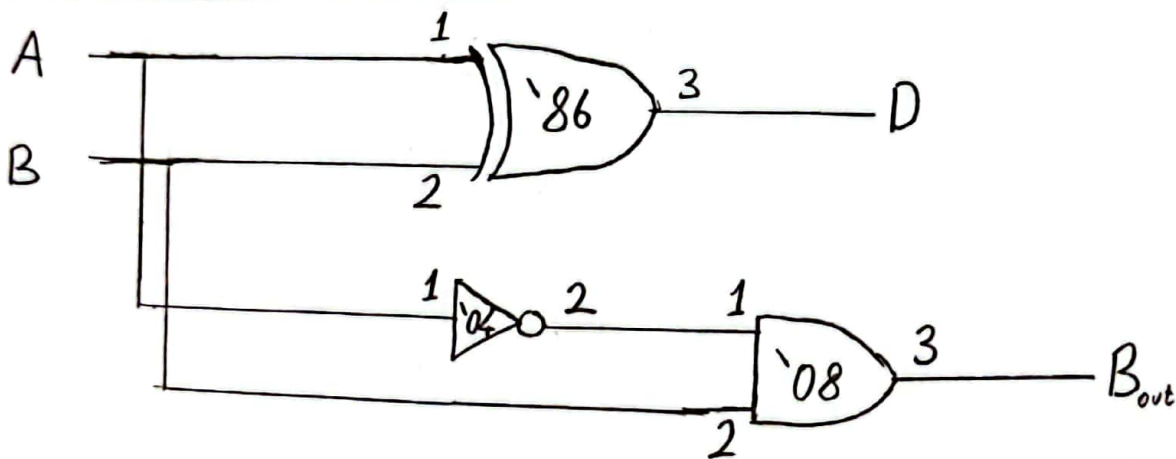
Aida Iynem
22002717

Figure 2 Half Adder



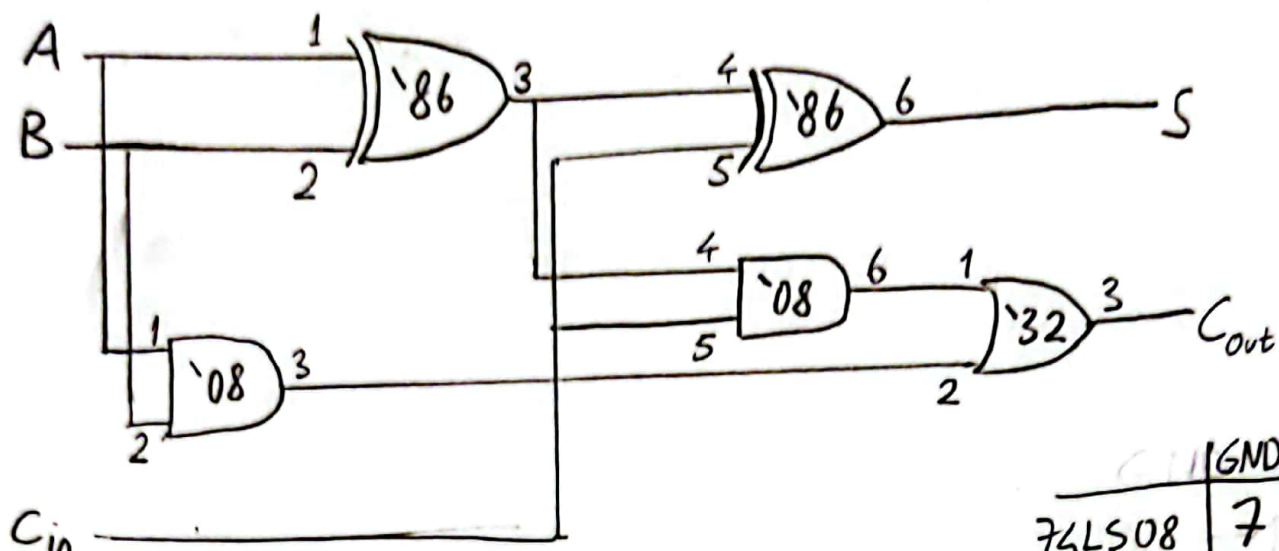
| | GND | V _{cc} |
|--------|-----|-----------------|
| 74LS08 | 7 | 14 |
| 74LS86 | 7 | 14 |

Figure 2 Half Subtractor



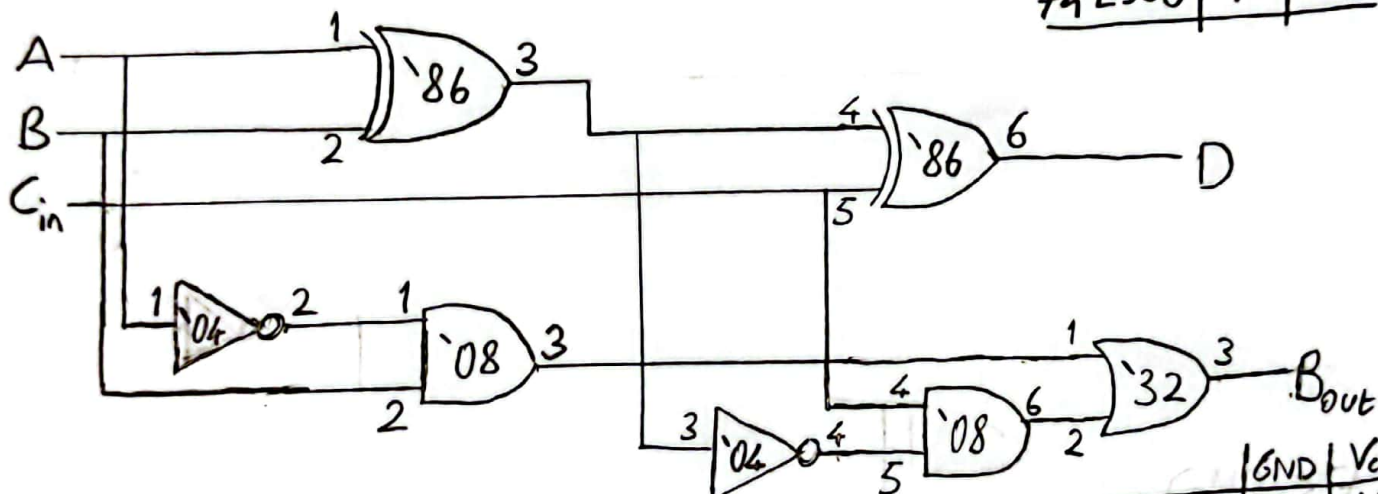
| | GND | V _{cc} |
|--------|-----|-----------------|
| 74LS04 | 7 | 14 |
| 74LS08 | 7 | 14 |
| 74LS86 | 7 | 14 |

Figure 3 Full Adder



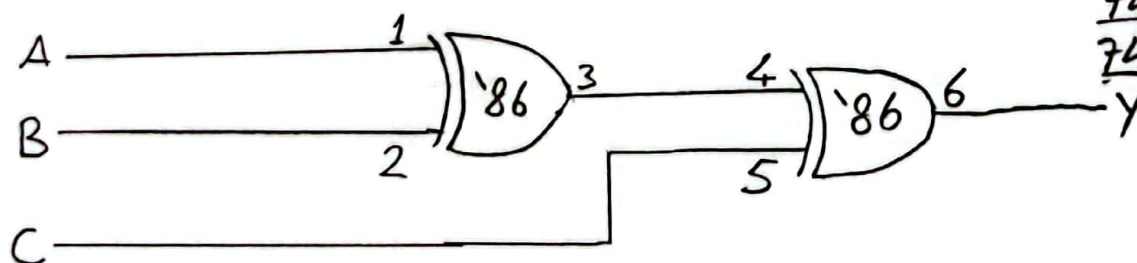
| | GND | V _{cc} |
|--------|-----|-----------------|
| 74LS08 | 7 | 14 |
| 74LS32 | 7 | 14 |
| 74LS86 | 7 | 14 |

Figure 3 Full Subtractor



| | GND | V _{cc} |
|--------|-----|-----------------|
| 74LS04 | 7 | 14 |
| 74LS08 | 7 | 14 |
| 74LS32 | 7 | 14 |
| 74LS86 | 7 | 14 |

3 Input XOR Gates Using 2 Input XOR Gates



| | GND | V _{cc} |
|--------|-----|-----------------|
| 74LS86 | 7 | 14 |