

Pic - Lab 6

1) 1-bit Full Adder

a)

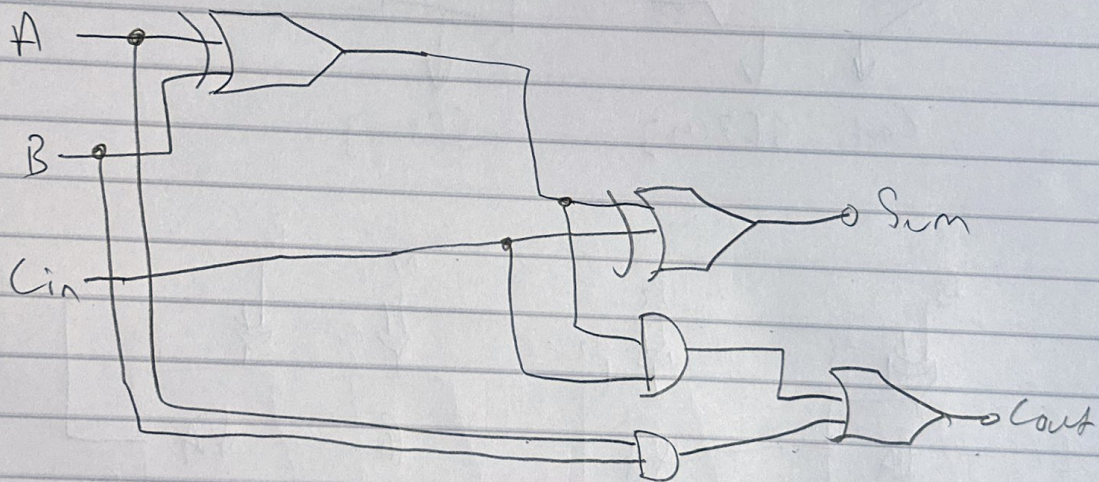
| A | B | Cin | Sum | Count |
|---|---|-----|-----|-------|
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 1 | 0 |
| 0 | 1 | 0 | 1 | 0 |
| 0 | 1 | 1 | 0 | 1 |
| 1 | 0 | 0 | 1 | 0 |
| 1 | 0 | 1 | 0 | 1 |
| 1 | 1 | 0 | 0 | 1 |
| 1 | 1 | 1 | 1 | 1 |

b)

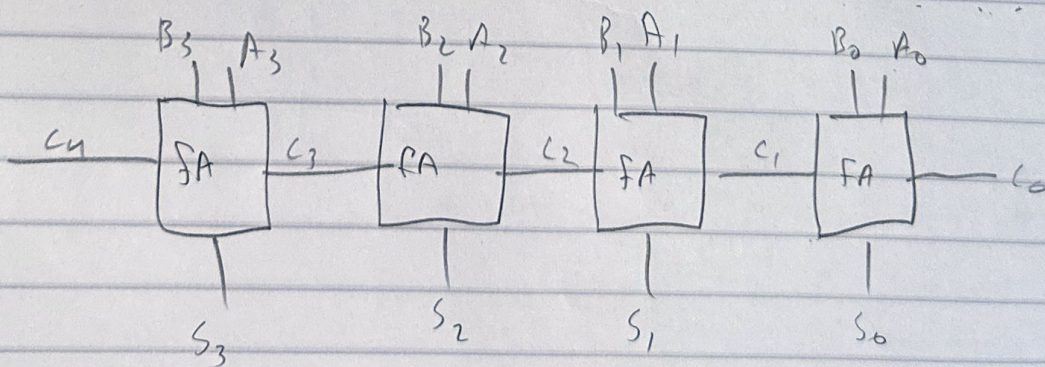
| Sum | B | Cin | 00 | 01 | 11 | 10 |
|-----|---|-----|----|----|----|----|
| A | 0 | | | 0 | | 1 |
| 1 | 1 | | 1 | | 1 | |

| Count | B | Cin | 00 | 01 | 11 | 10 |
|-------|---|-----|----|----|----|----|
| A | 0 | | | | 1 | |
| 1 | 1 | | 1 | 1 | 1 | |

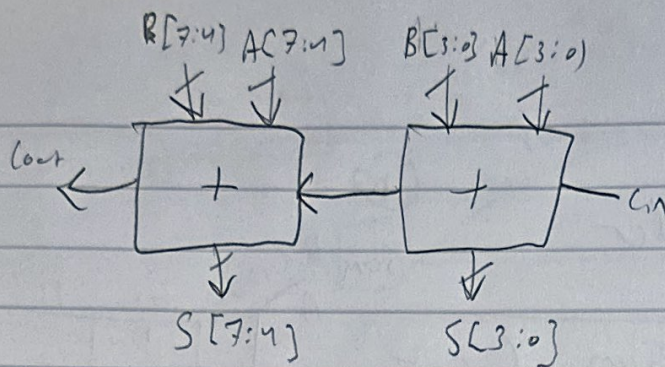
c)



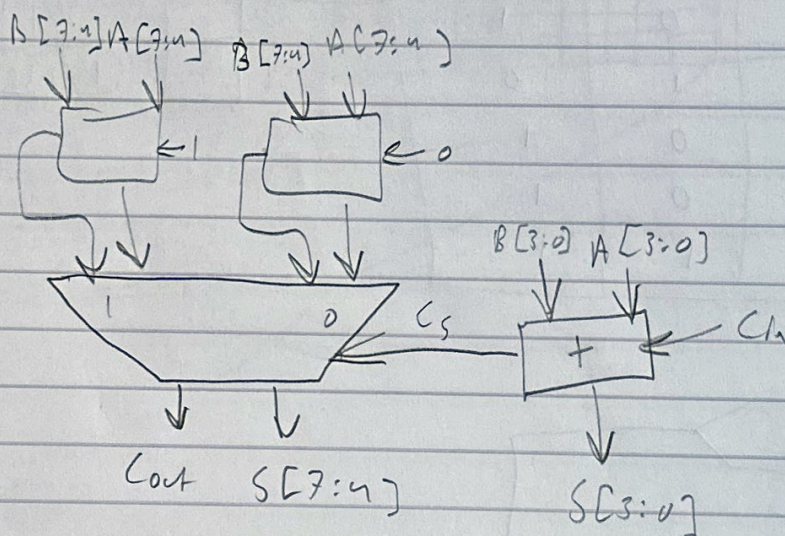
2) n-bit RCA



3



4



5

