

Projeto 1 - ULA

Nome: Álvaro Lúcio Almeida Ribeiro

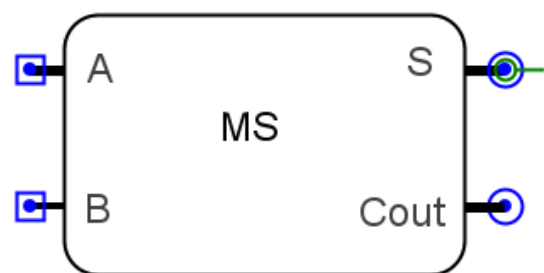
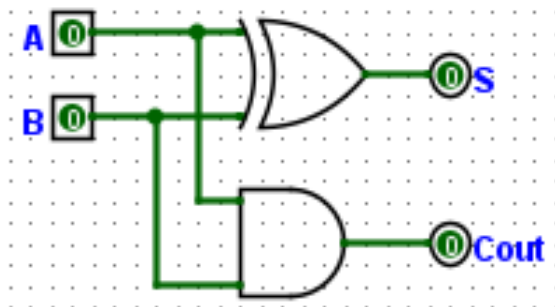
Matrícula: 163

Nome: Ewel Fernandes Pereira

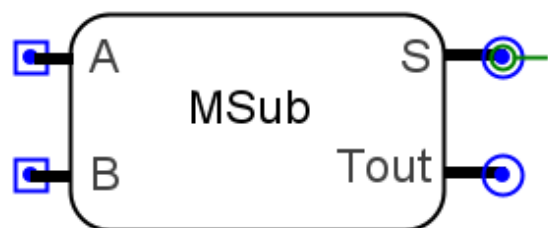
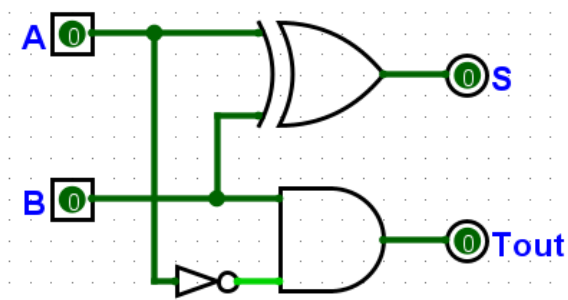
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Resolução:

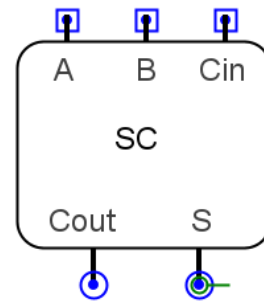
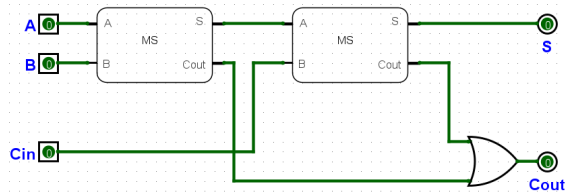
Meio Somador



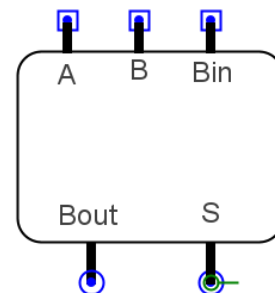
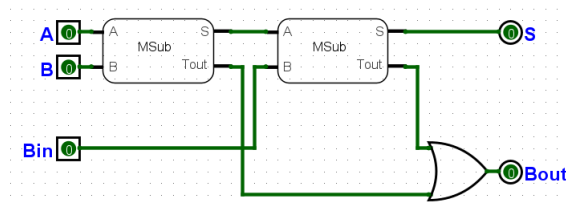
Meio Subtrator



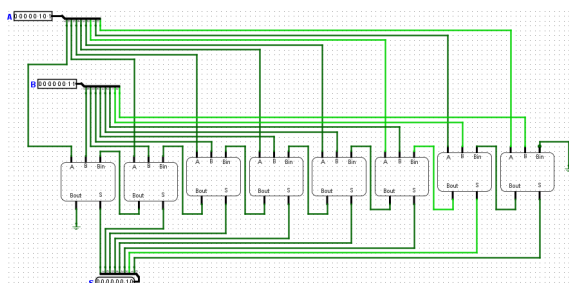
Somador Completo



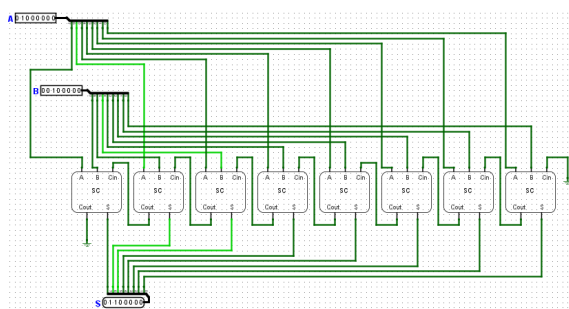
Subtrator Completo



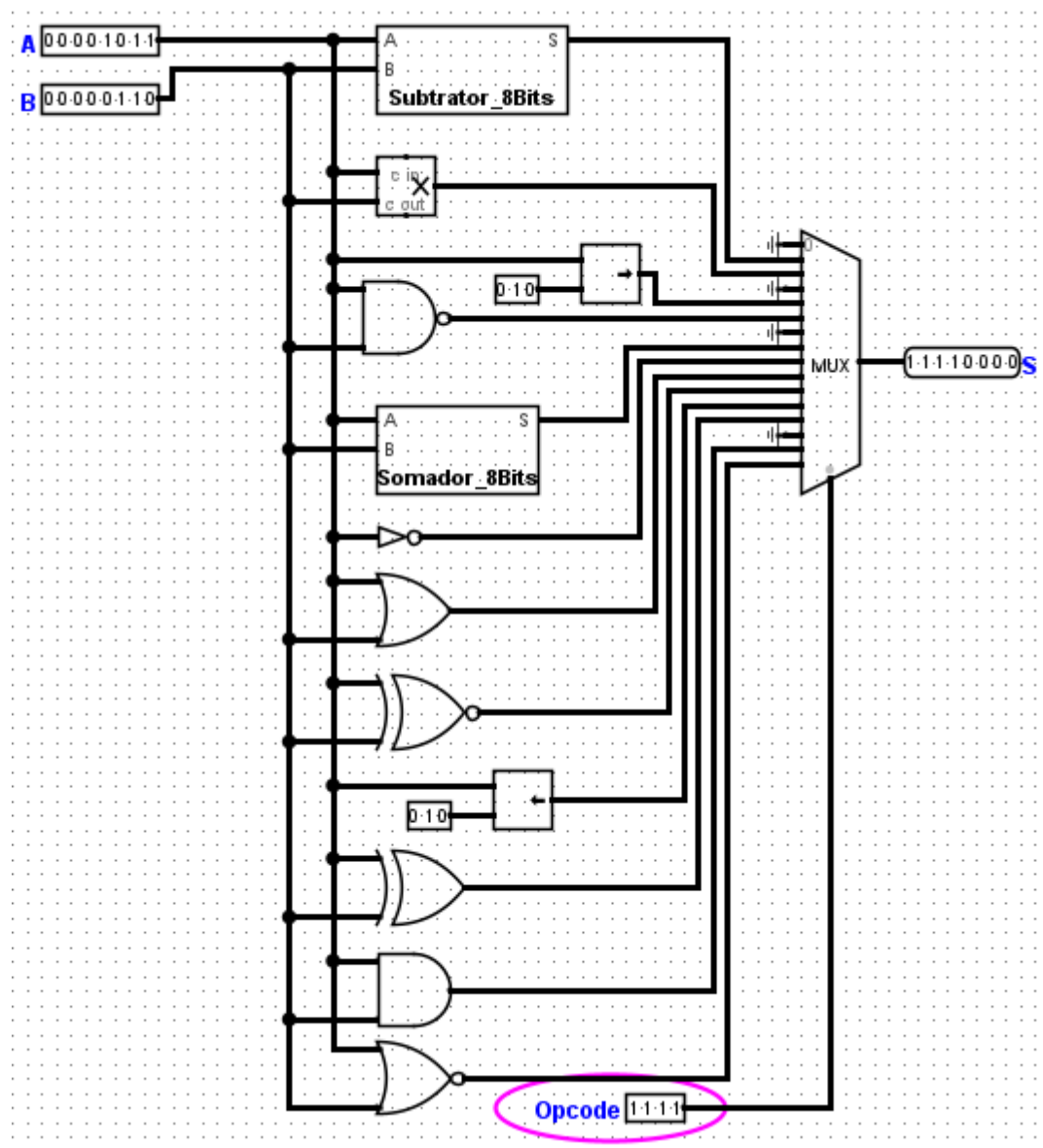
Subtrator completo de 8 Bits:



Somador completo de 8 Bits:



Resolução da proposita do Projeto:



- A = 00001011
- B = 00000110

No bit 0: Terra

- S = Terra

No bit 1: Subtração

- $S = A - B = 00001011 - 00000110 = 00000101$

No bit 2: Multiplicação

- $S = A * B = 00001011 * 00000110 = 01000010$

No bit 3: Terra

- $S = \text{Terra}$

No bit 4: Deslocamento para Direita

- $S = A \gg 2 = 00000010$

No bit 5: Nand

- $S = (A * B)' = (00001011 * 00000110)' = 11111101$

No bit 6: Terra

- $S = \text{Terra}$

No bit 7: Adição

- $S = A + B = 00001011 + 00000110 = 00010001$

No bit 8: Inversora

- $S = A' = 11110100$

No bit 9: Ou

- $S = A \mid B = 00001011 \mid 00000110 = 00001111$

No bit 10: Não Ou Exclusivo

- $S = A \odot B = \sim(A \oplus B) = \sim(00001011 \oplus 00000110) = 11110010$

No bit 11: Deslocamento Esquerda

- $S = A \ll 4 = 10110000$

No bit 12: Ou Exclusivo

- $S = A \oplus B = 00001011 \oplus 00000110 = 00001101$

No bit 13: Terra

- $S = \text{Terra}$

No bit 14: And

- $S = A \& B = 00001011 \& 00000110 = 00000010$

No bit 15: Não Ou

- $S = (A \mid B)' = (00001011 \mid 00000110)' = 11110000$