



To perform **arithmetic operations** by the help of parallel adder, just perform 'plain addition' among the input.
To perform **logical operations** by the help of a parallel adder just perform 'XOR' operations among the inputs.

Logic Operations (XOR operation)

S ₂	S ₁	S ₀	X	Y	Z=C _{in}	$F = x \oplus y$	Operation
1	0	0	A+B	0	0	A OR B	OR
1	0	1	A	B	0	$A \oplus B$	XOR
1	1	0	$A + \bar{B}$	\bar{B}	0	A AND B	AND
1	1	1	A	1	0	\bar{A}	NOT

Arithmetic operations (Plain addition)

