Boolean Algebra

- A + 0 = A
- A + 1 = 1
- A + A = A
- A + A = 1
- A . 0 = 0
- A . 1 = A
- A . A = A
- A = A
- A . A = 0
- A + A.B = A
- A+ A.B = A+B
- (A+B) (A+C)=A+BC

Distribution law

- $A(B+C) = AB+AC$
- $A + BC = (A+B)(A+C)$

DeMorgans Theorems

1. $\overline{A\,B} = \bar{A}+\bar{B}$

2. $\overline{A+B} = \bar{A}\,\bar{B}$

A	B	$\overline{AB}$	$\overline{A}+\overline{B}$
0	0	1	1
1	0	1	1
0	1	1	1
1	1	0	0

A	B	$\overline{A+B}$	$\overline{A}\,\overline{B}$
0	0	1	1
1	0	0	0
0	1	0	0
1	1	0	0