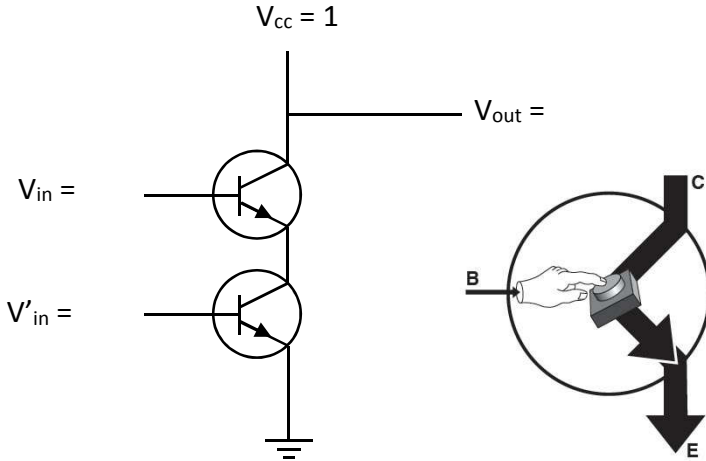


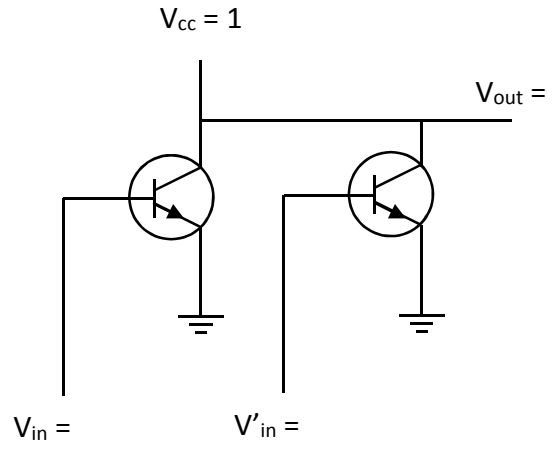
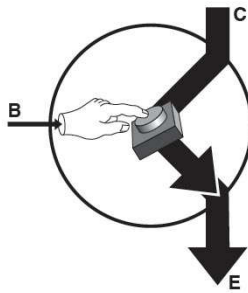
Architecture des ordinateurs

A l'échelle microscopique : le transistor

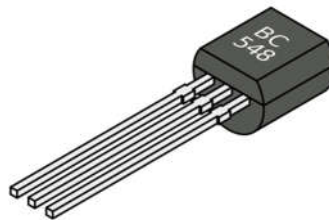
Transistors en série	Transistors en parallèles
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V_{in}	V'_{in}	V_{out}
0	0	
0	1	
1	0	
1	1	



V_{in}	V'_{in}	V_{out}
0	0	
0	1	
1	0	
1	1	



Portes logiques

a	b	AND
0	0	
0	1	
1	0	
1	1	

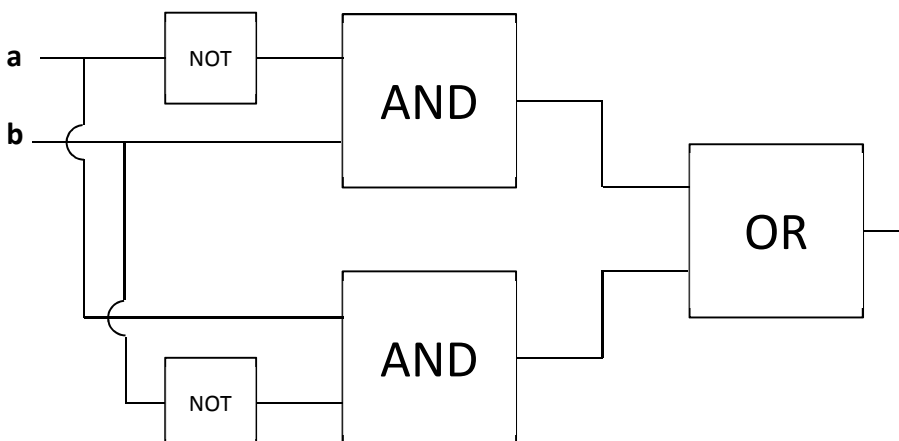
a	b	NAND
0	0	
0	1	
1	0	
1	1	

a	b	OR
0	0	
0	1	
1	0	
1	1	

a	b	NOR
0	0	
0	1	
1	0	
1	1	

$a \cdot b$	$\overline{a \cdot b} = \overline{a} + \overline{b}$	$a + b$	$\overline{a + b} = \overline{a} \cdot \overline{b}$
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Quelle est la table de cette combinaison ?



a	b	
0	0	
0	1	
1	0	
1	1	

$a \oplus b$