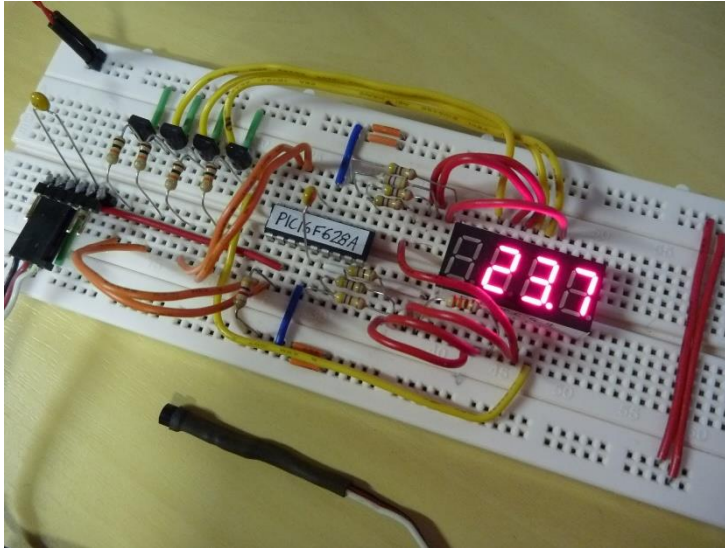


CIRCUITOS DIGITALES

Tarea #991



Materia: Organización y diseño de computadoras.

Docente: Ismael Jiménez
Sánchez

Parcial: 2

Universidad del Caribe
Alumno: Sergio Alexander Sanchez Garcia

NOT

7404

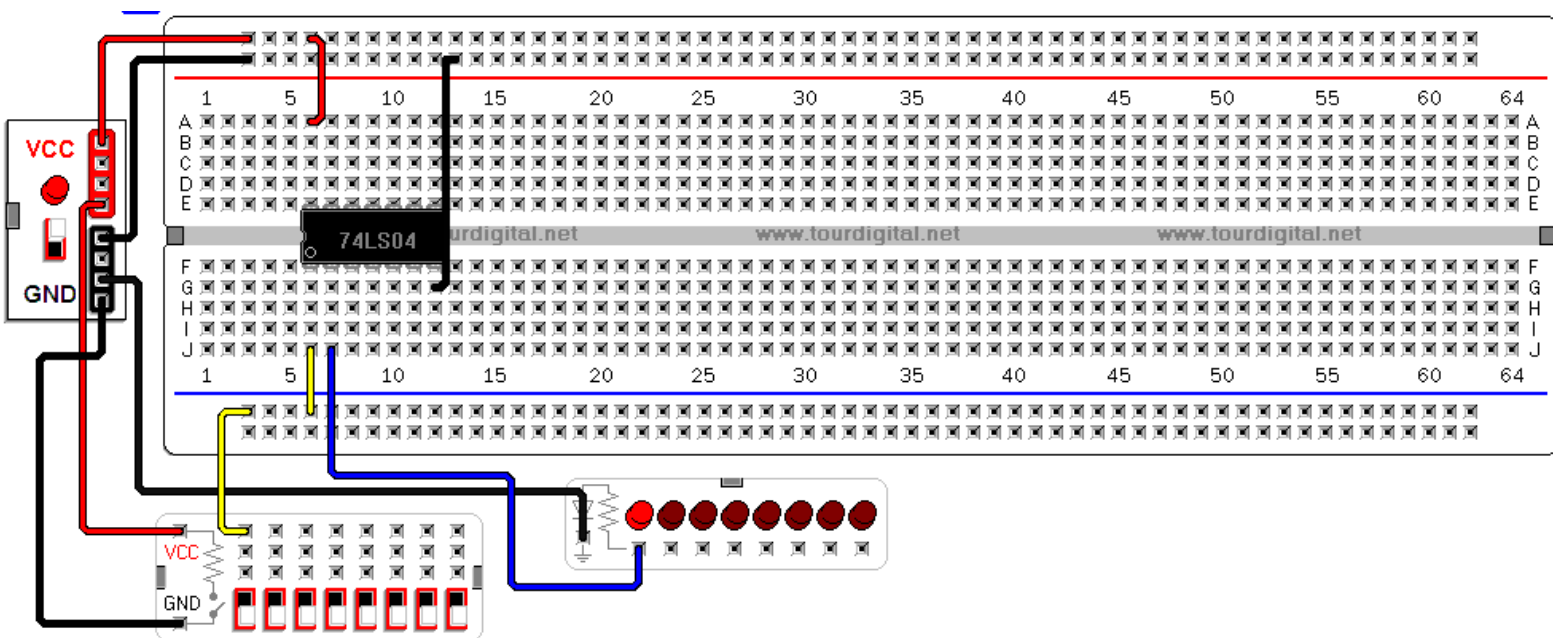
Tabla de verdad

P	$\neg P$
0	1
1	0

Diagrama



Protoboard



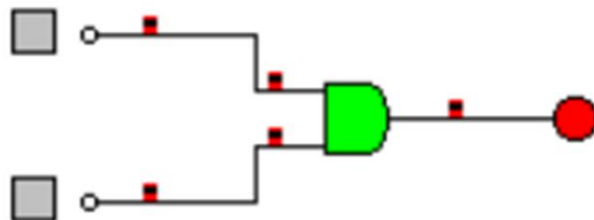
AND

2 entradas 7408

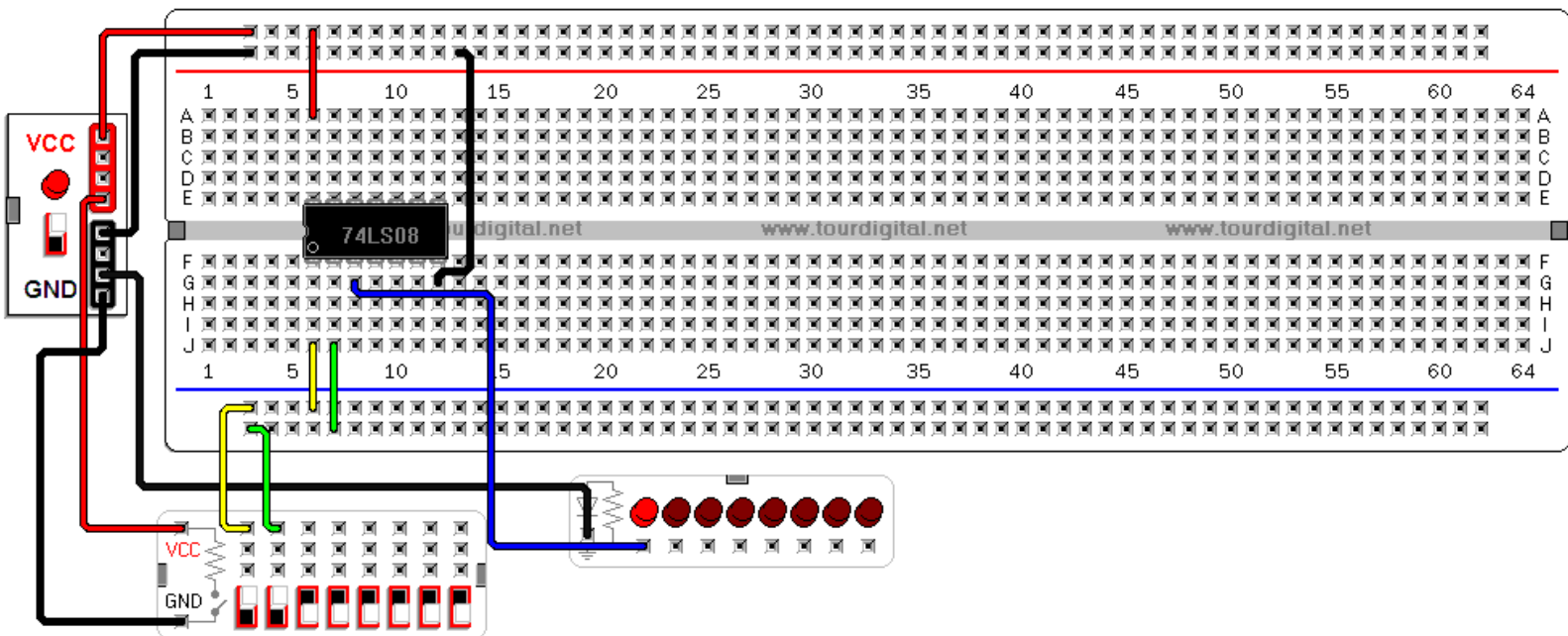
Tablas de verdad

P	Q	$P \wedge Q$
0	0	0
0	1	0
1	0	0
1	1	1

Diagrama



Protoboard



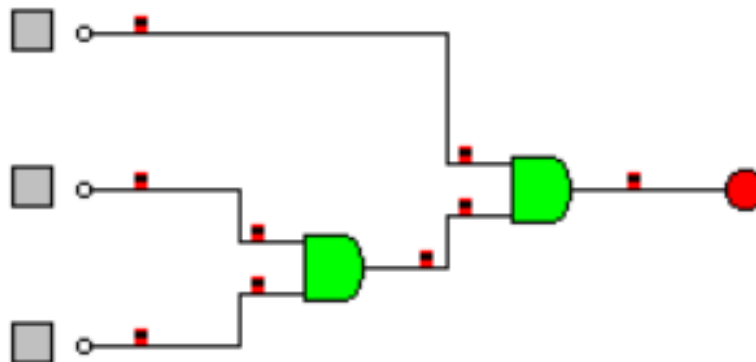
AND

3 entradas 7411

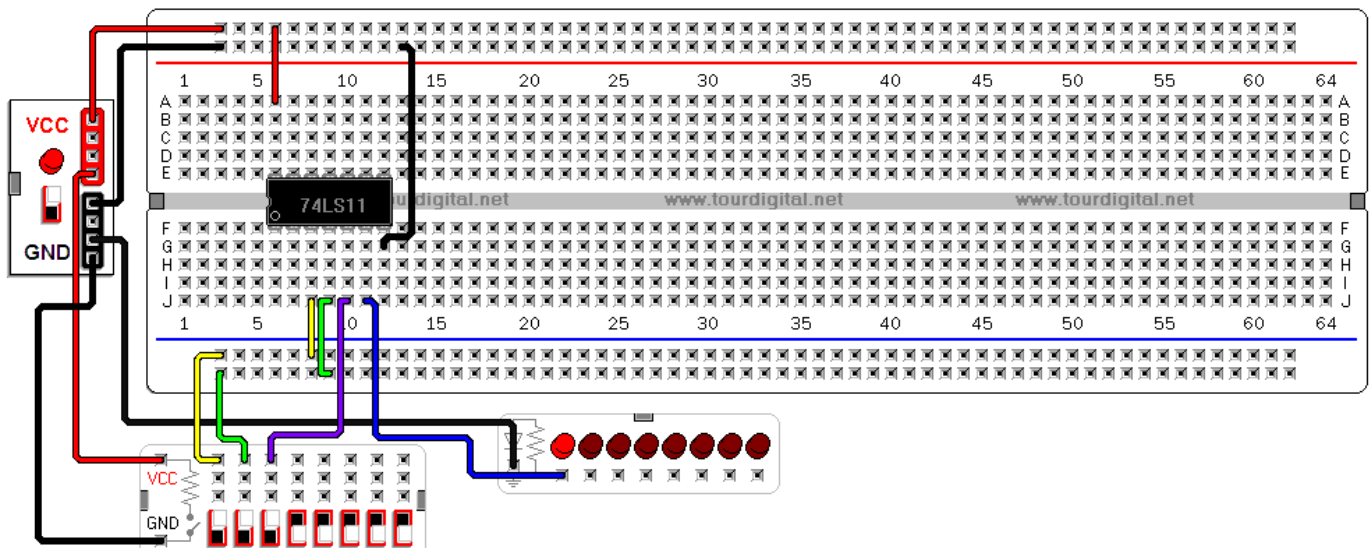
Tablas de verdad

P	Q	R	$P \wedge Q$	$(P \wedge Q) \wedge R$
0	0	0	0	0
0	0	1	0	0
0	1	0	0	0
0	1	1	0	0
1	0	0	0	0
1	0	1	0	0
1	1	0	1	0
1	1	1	1	1

Diagrama



Protoboard



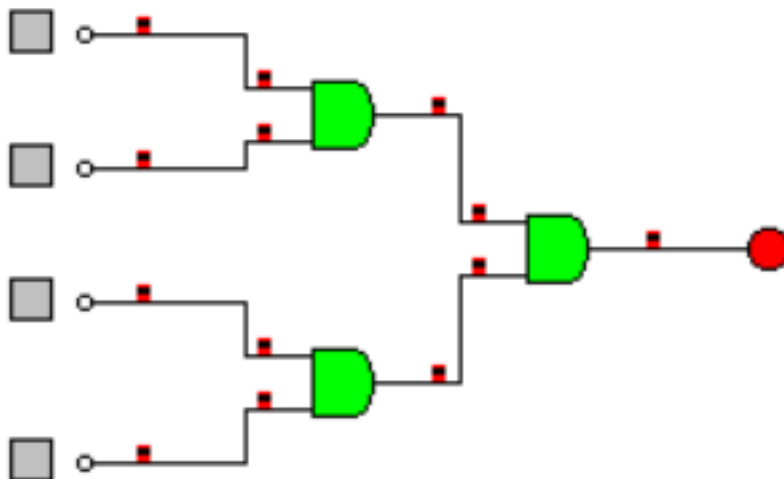
AND

4 entradas 7421

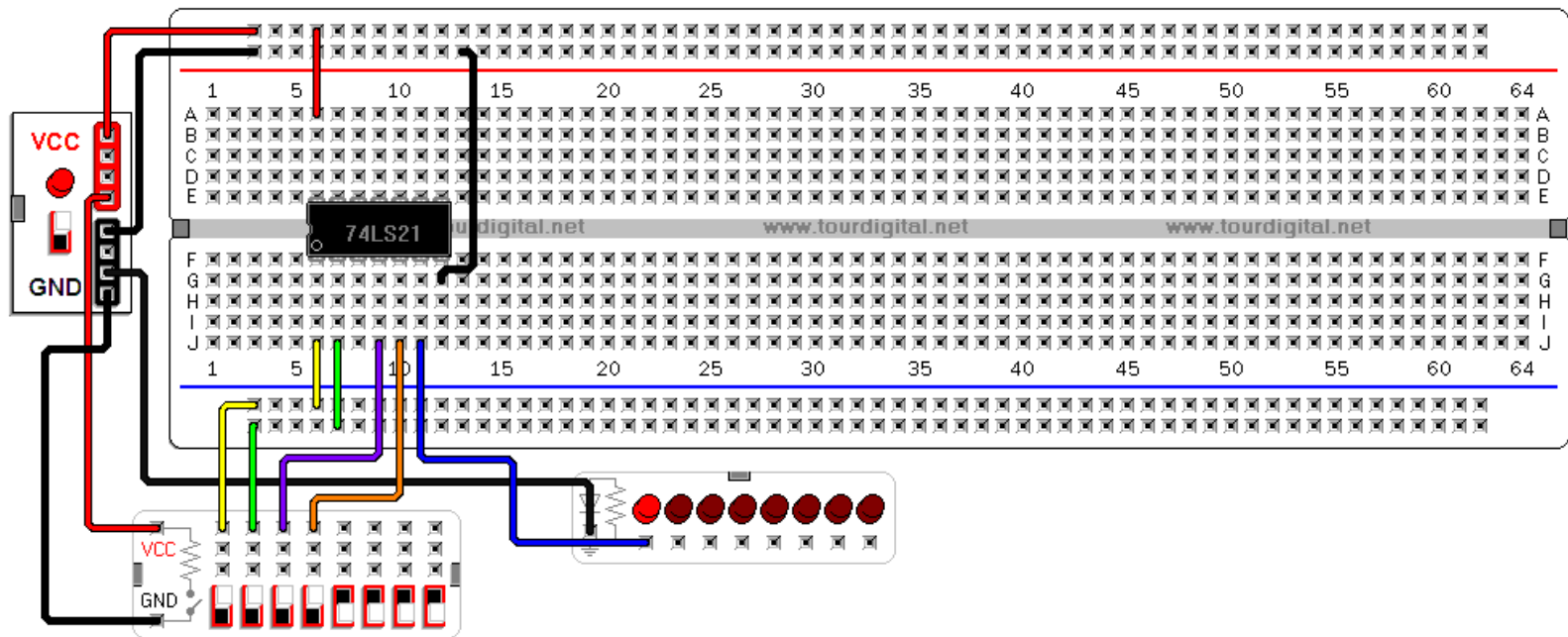
Tablas de verdad

P	Q	R	S	$P \wedge Q$	$R \wedge S$	$(P \wedge Q) \wedge (R \wedge S)$
0	0	0	0	0	0	0
0	0	0	1	0	0	0
0	0	1	0	0	0	0
0	0	1	1	0	1	0
0	1	0	0	0	0	0
0	1	0	1	0	0	0
0	1	1	0	0	0	0
0	1	1	1	0	1	0
1	0	0	0	0	0	0
1	0	0	1	0	0	0
1	0	1	0	0	0	0
1	0	1	1	0	1	0
1	1	0	0	1	0	0
1	1	0	1	1	0	0
1	1	1	0	1	0	0
1	1	1	1	1	1	1

Diagrama



Protoboard



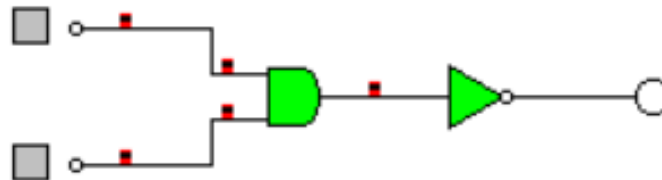
NAND

2 entradas 7400

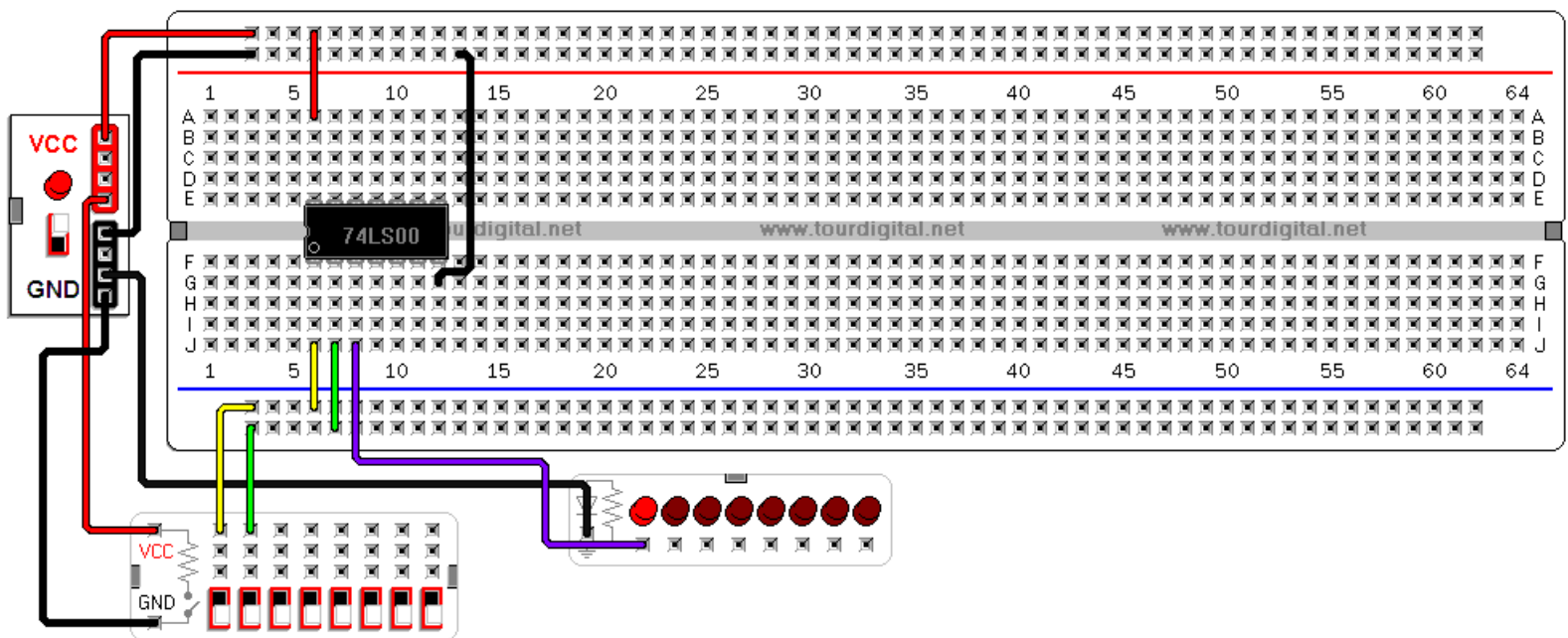
Tablas de verdad

P	Q	$P \wedge Q$	$\neg(P \wedge Q)$
0	0	1	1
0	1	0	1
1	0	0	1
1	1	0	0

Diagrama



Protoboard



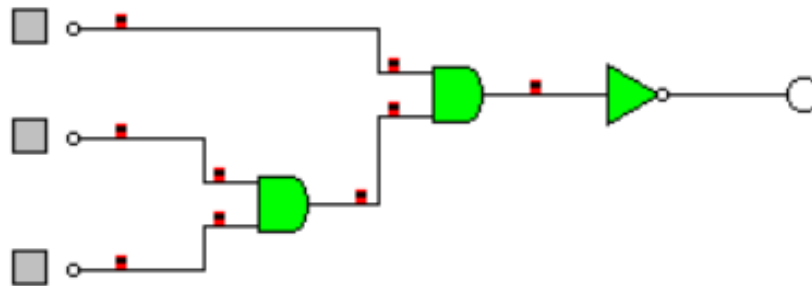
NAND

3 entradas 7410

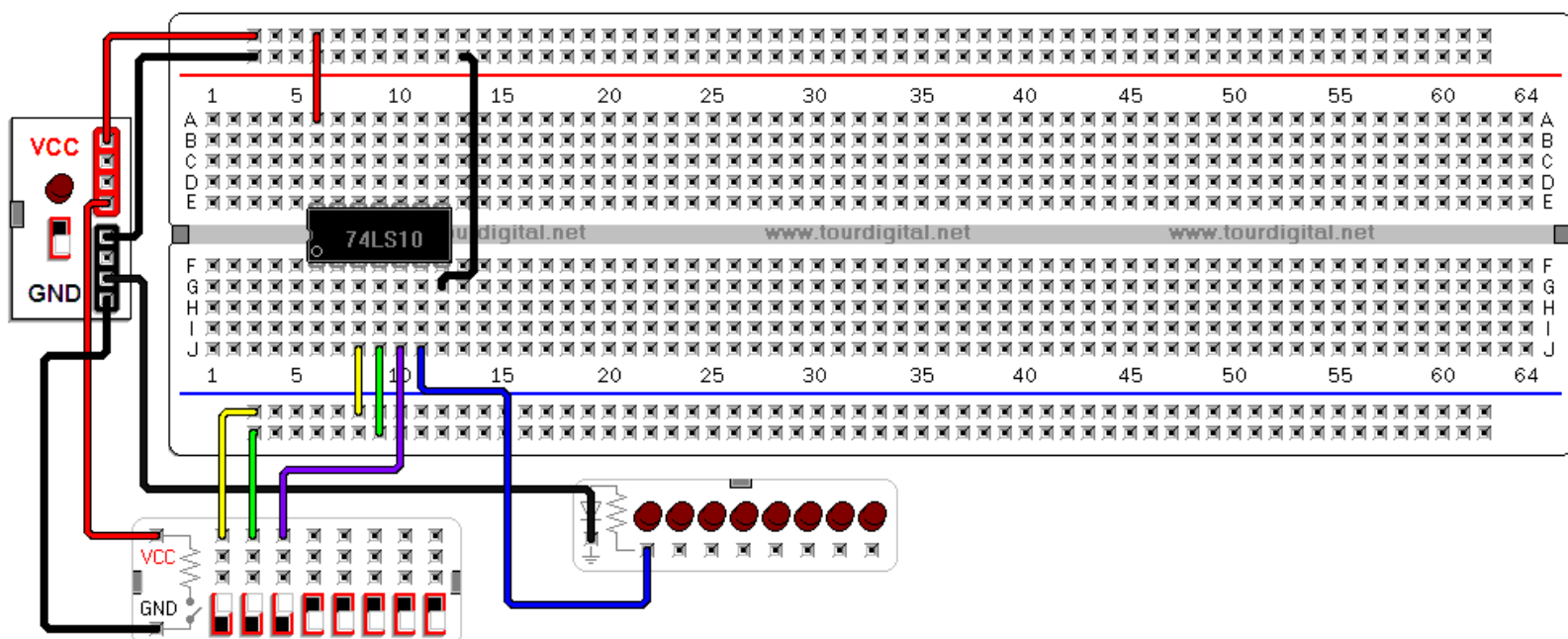
Tablas de verdad

P	Q	R	$(P \wedge Q)$	$(P \wedge Q) \wedge R$	$\neg(P \wedge Q) \wedge R$
0	0	0	0	0	1
0	0	1	0	0	1
0	1	0	0	0	1
0	1	1	0	0	1
1	0	0	0	0	1
1	0	1	0	0	1
1	1	0	1	0	1
1	1	1	1	1	0

Diagrama



Protoboard



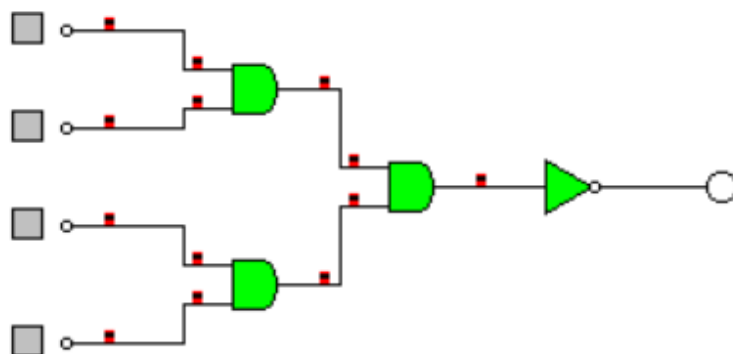
NAND

4 entradas 7420

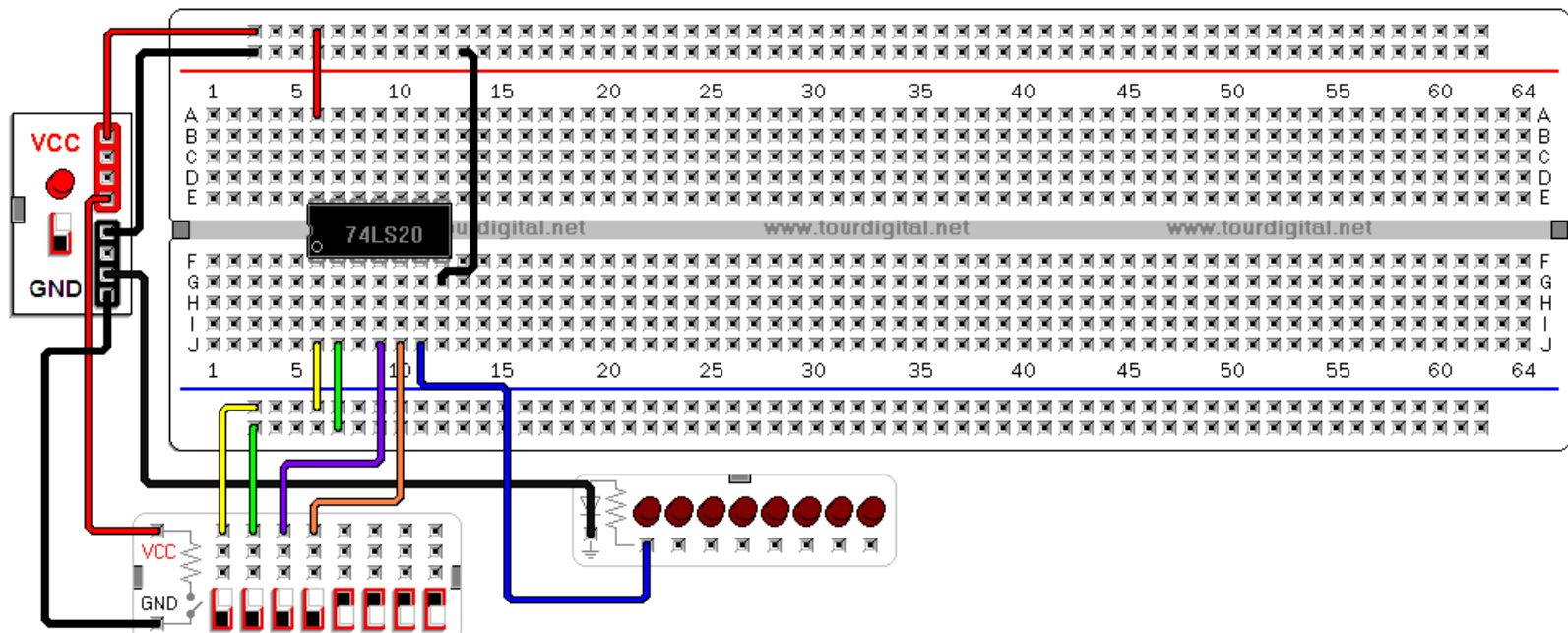
Tablas de verdad

P	Q	R	S	$P \wedge Q$	$R \wedge S$	$(P \wedge Q) \wedge (R \wedge S)$	$\neg(P \wedge Q) \wedge (R \wedge S)$
0	0	0	0	0	0	0	1
0	0	0	1	0	0	0	1
0	0	1	0	0	0	0	1
0	0	1	1	0	1	0	1
0	1	0	0	0	0	0	1
0	1	0	1	0	0	0	1
0	1	1	0	0	0	0	1
0	1	1	1	0	1	0	1
1	0	0	0	0	0	0	1
1	0	0	1	0	0	0	1
1	0	1	0	0	0	0	1
1	0	1	1	0	1	0	1
1	1	0	0	1	0	0	1
1	1	0	1	1	0	0	1
1	1	1	0	1	0	0	1
1	1	1	1	1	1	1	0

Diagrama



Protoboard



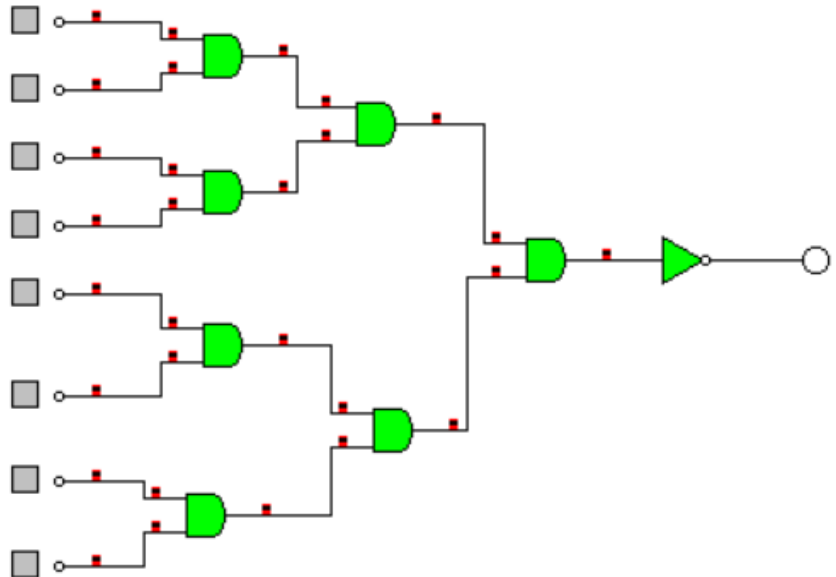
NAND

8 entradas 7430

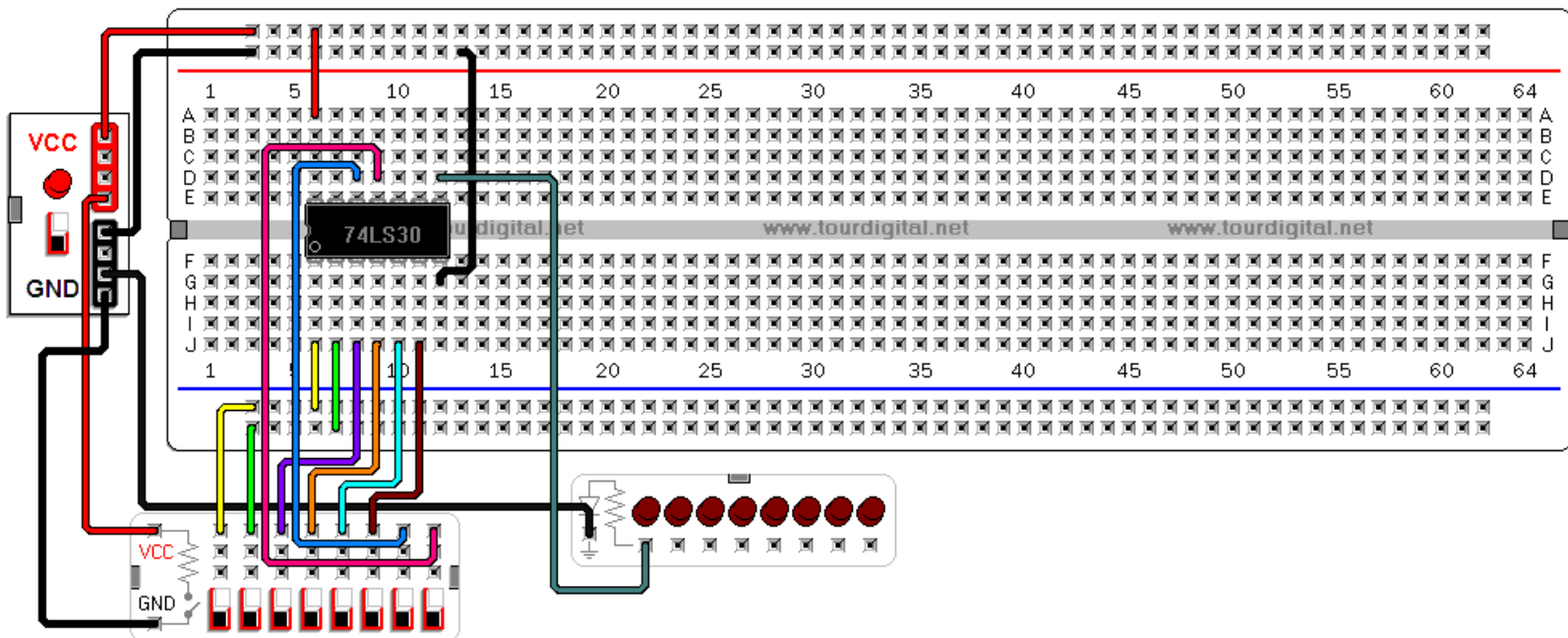
Tablas de verdad

Entradas	Salidas
Todas 0	1
Todas 1	0

Diagrama



Protoboard



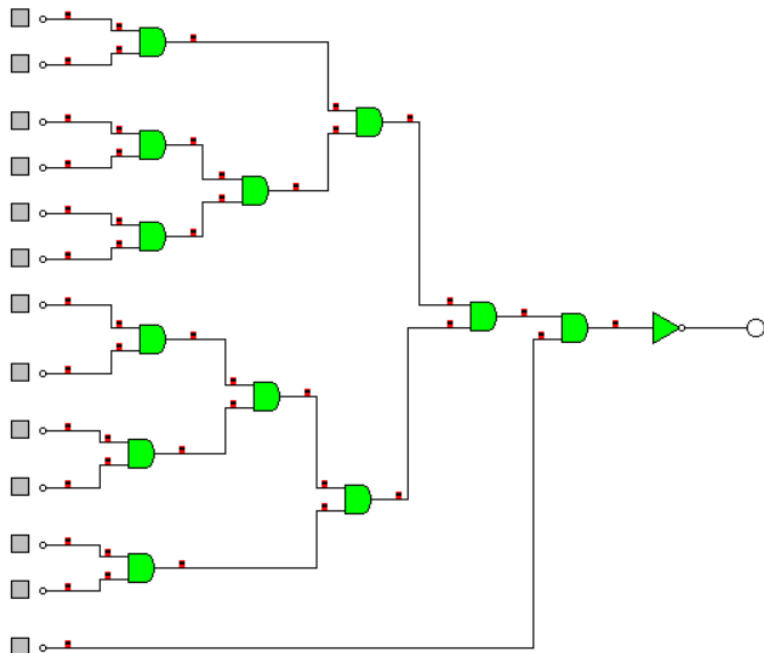
NAND

13 entradas 74133

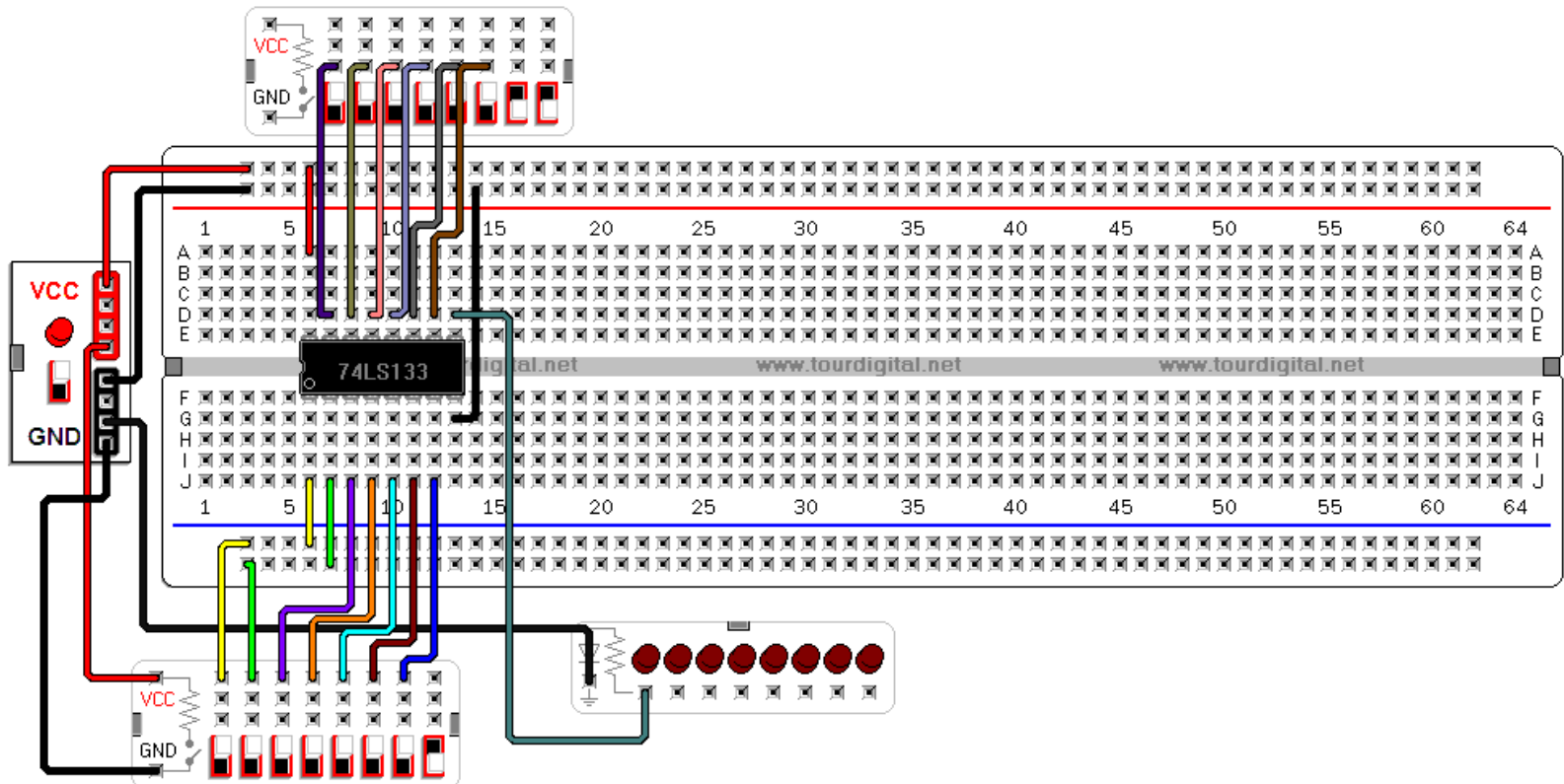
Tablas de verdad

Entradas	Entradas
Todas 0	1
Todas 1	0

Diagrama



Protoboard



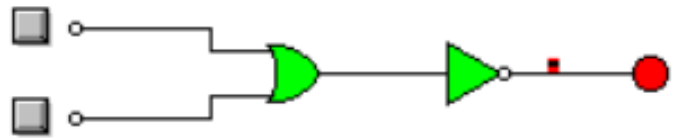
NOR

2 entradas 7402

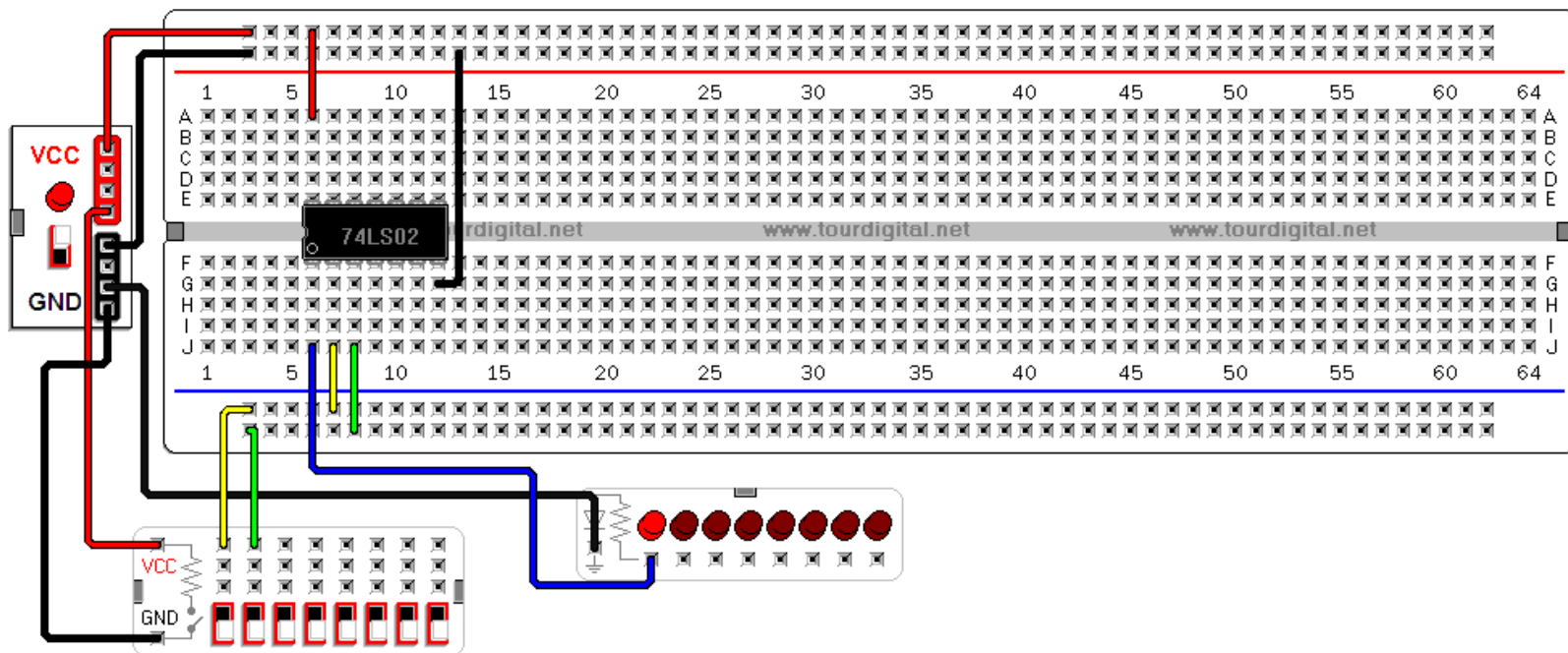
Tablas de verdad

P	Q	$P \wedge Q$	$\neg(P \wedge Q)$
0	0	0	1
0	1	1	0
1	0	1	0
1	1	1	0

Diagrama



Protoboard



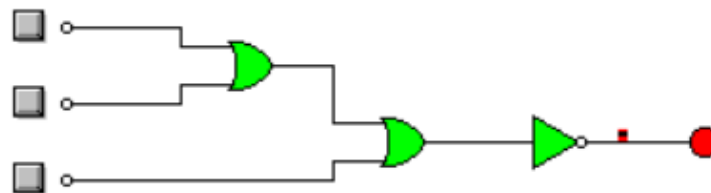
NOR

3 entradas 7427

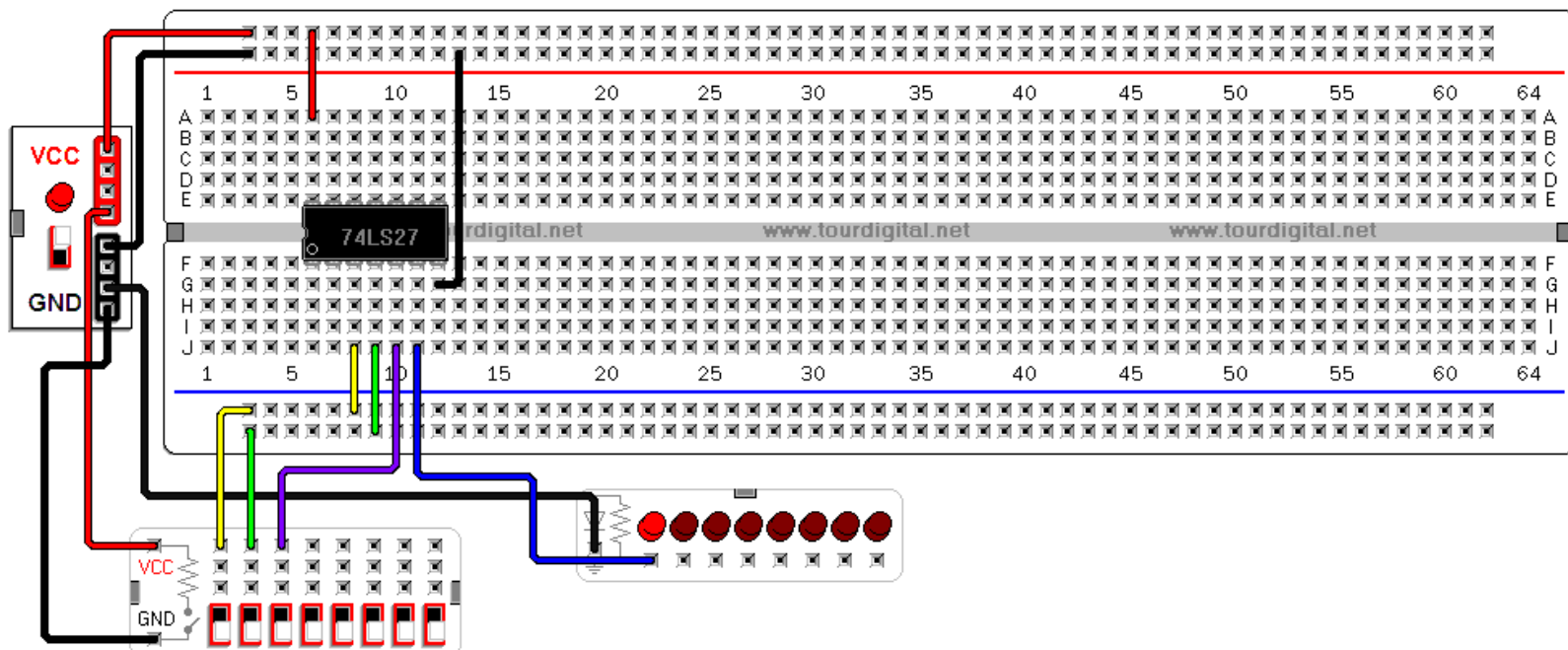
Tablas de verdad

P	Q	R	$P \wedge Q$	$(P \wedge Q) \wedge R$	$\neg((P \wedge Q) \wedge R)$
0	0	0	0	0	1
0	0	1	0	1	0
0	1	0	1	1	0
0	1	1	1	1	0
1	0	0	1	1	0
1	0	1	1	1	0
1	1	0	1	1	0
1	1	1	1	1	0

Diagrama



Protoboard



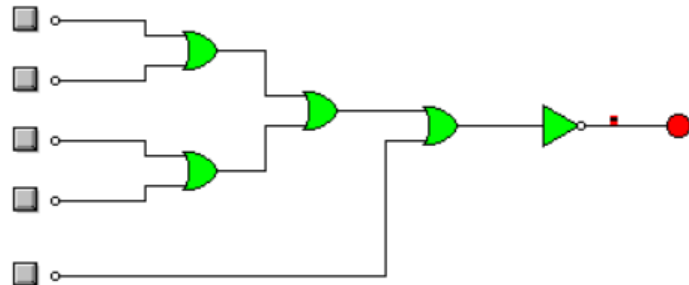
NOR

3 entradas 7427

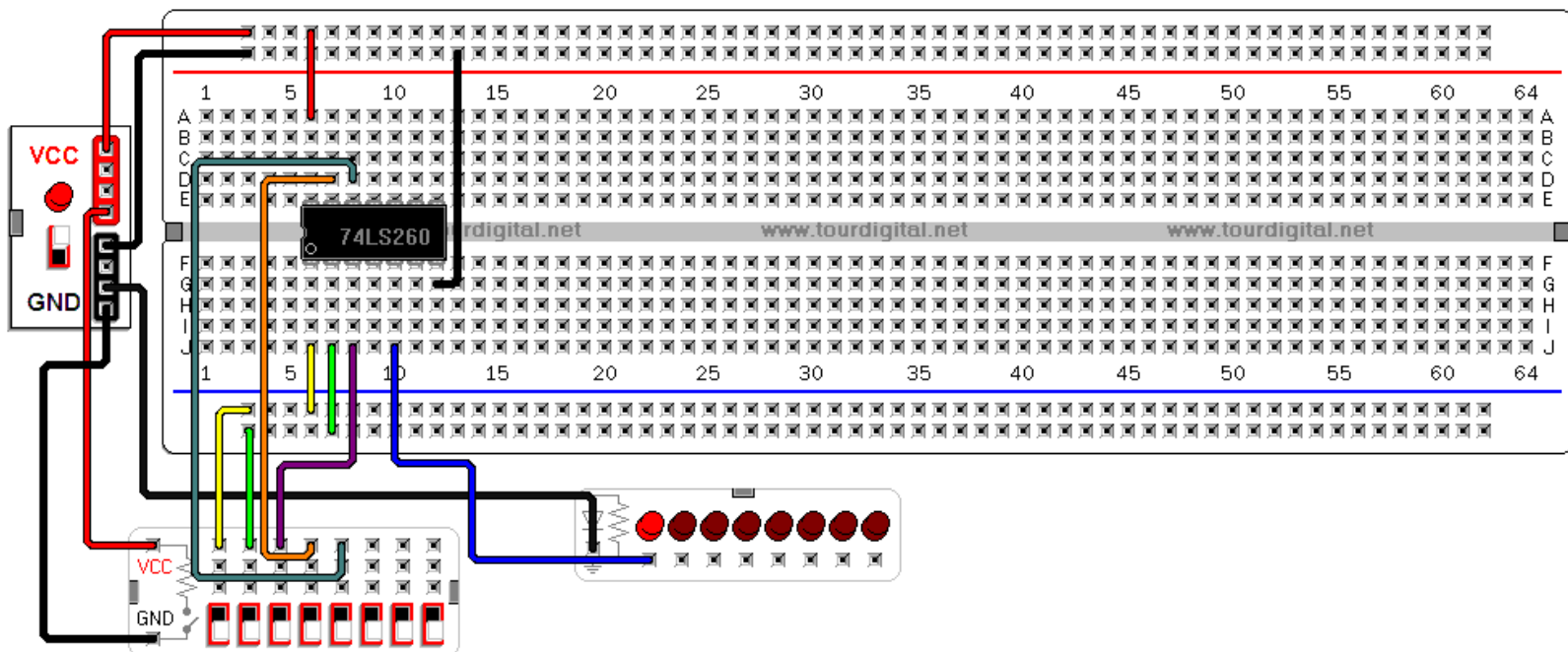
Tablas de verdad

Entrada	Salida
Todos 0	1
No todos son 0	0

Diagrama



Protoboard



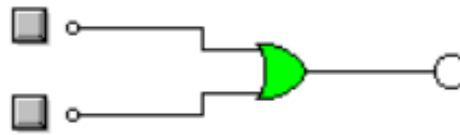
OR

2 entradas 7432

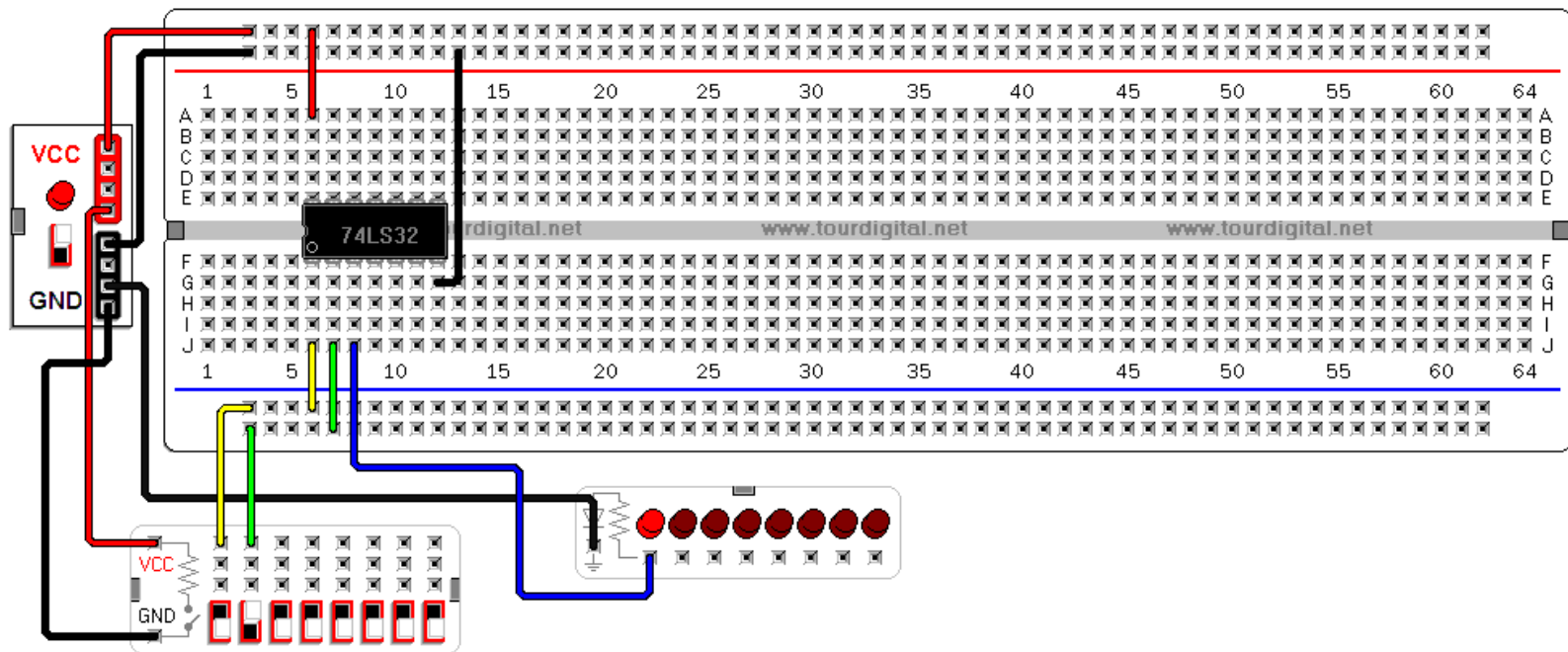
Tablas de verdad

P	Q	$P \wedge Q$
0	0	0
0	1	1
1	0	1
1	1	1

Diagrama



Protoboard



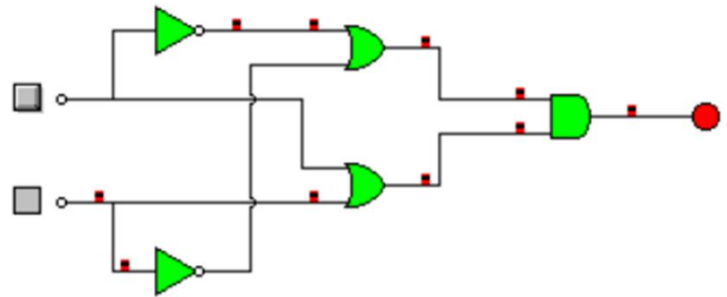
XOR

2 entradas 7427

Tablas de verdad

P	Q	$P \neq Q$
0	0	0
0	1	1
1	0	1
1	1	0

Diagrama



Protoboard

