Test1 (new circuit)

new circuit

create table with 2 inputs and 2 outputs

in0	in1	c1	led1
0	0	1	1
0	1	0	1
1	0	0	0
1	1	1	0

create table with 2 inputs and 3 outputs

in2	c1	c2	c3	c4
0	0	0	0	1
0	1	0	1	1
1	0	0	1	1
1	1	1	0	1

create table with 3 inputs and 2 outputs

in3	c2	c3	c5	led2
0	0	0	0	1
0	0	1	0	1
0	1	0	1	1
0	1	1	1	1
1	0	0	0	0
1	0	1	0	0
1	1	0	1	0
1	1	1	1	1

create table with 2 inputs and 1 outputs

in4	in5	led3
0	0	0
0	1	0

| 1 | 0 | 0 |
| 1 | 1 | 1 |

create table with 3 inputs and 1 outputs

in6 in7 c5 led0

0	0	0	1
0	0	1	0
0	1	0	0
0	1	1	1
1	0	0	0
1	0	1	0
1	1	0	1
1	1	1	0

finish

input 00000000

LED0 = on

LED1 = on

LED2 = on

LED3 = off

input 00100110

LED0 = on

LED1 = on

LED2 = on

LED3 = off

input 11101101

LED0 = on

LED1 = off

LED2 = off

LED3 = off

input 01010001

LED0 = off

LED1 = off

LED2 = on

LED3 = off

input 11011011

LED0 = on

LED1 = off

LED2 = off

LED3 = off

input 10100101

LED0 = off

LED1 = off

LED2 = on

LED3 = off

Test2 (new circuit)

new circuit

create table with 2 inputs and 3 outputs

in0 in2 c1 c3 led0

0	0	0	1	1
0	1	0	0	0
1	0	0	1	0
1	1	0	0	1

create table with 3 inputs and 2 outputs

in3 c1 c3 c2 c4

0	0	0	0	1
0	0	1	0	0
0	1	0	1	0

0	1	1	1	1
1	0	0	0	1
1	0	1	0	1
1	1	0	1	0
1	1	1	1	0

create table with 2 inputs and 1 outputs

c2	c3	c5
0	0	0
0	1	1
1	0	1
1	1	0

create table with 3 inputs and 1 outputs

in1	c4	c5	led1
0	0	0	0
0	0	1	1
0	1	0	0
0	1	1	0
1	0	0	1
1	0	1	1
1	1	0	0
1	1	1	1

finish

input 1111

LED0 = on

LED1 = off

LED2 = dont care

LED3 = dont care

input 0000

LED0 = on

LED1 = on

LED2 = dont care

LED3 = dont care

input 1001

LED0 = off

LED1 = off

LED2 = dont care

LED3 = dont care

input 0101

LED0 = on

LED1 = off

LED2 = dont care

LED3 = dont care

input 0010

LED0 = on

LED1 = on

LED2 = dont care

LED3 = dont care