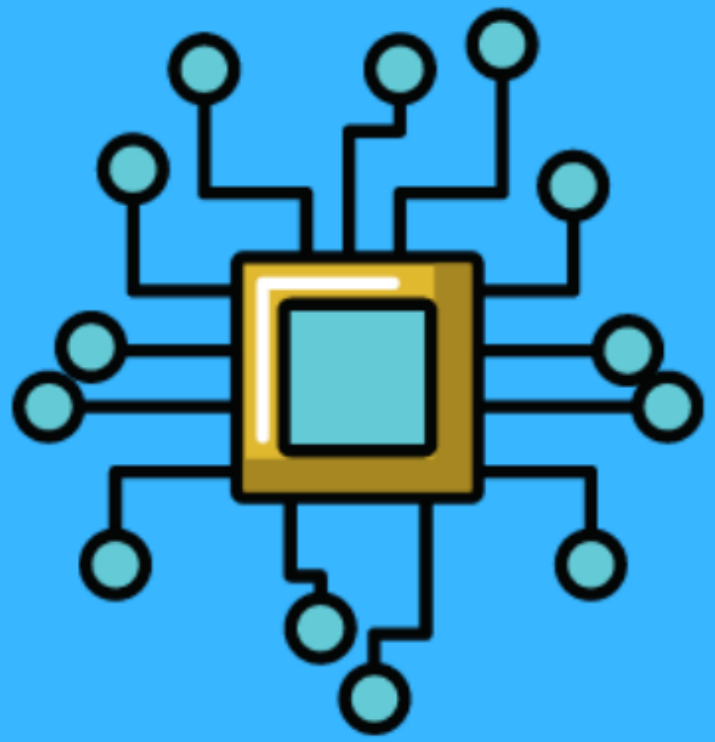
Electronics



Lab 3 & 4
OR & AND gates on Proteus

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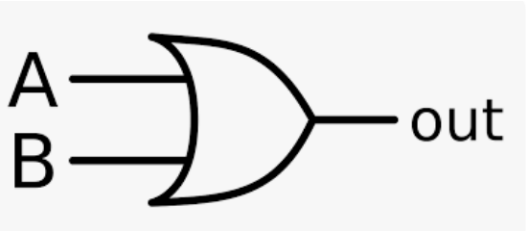
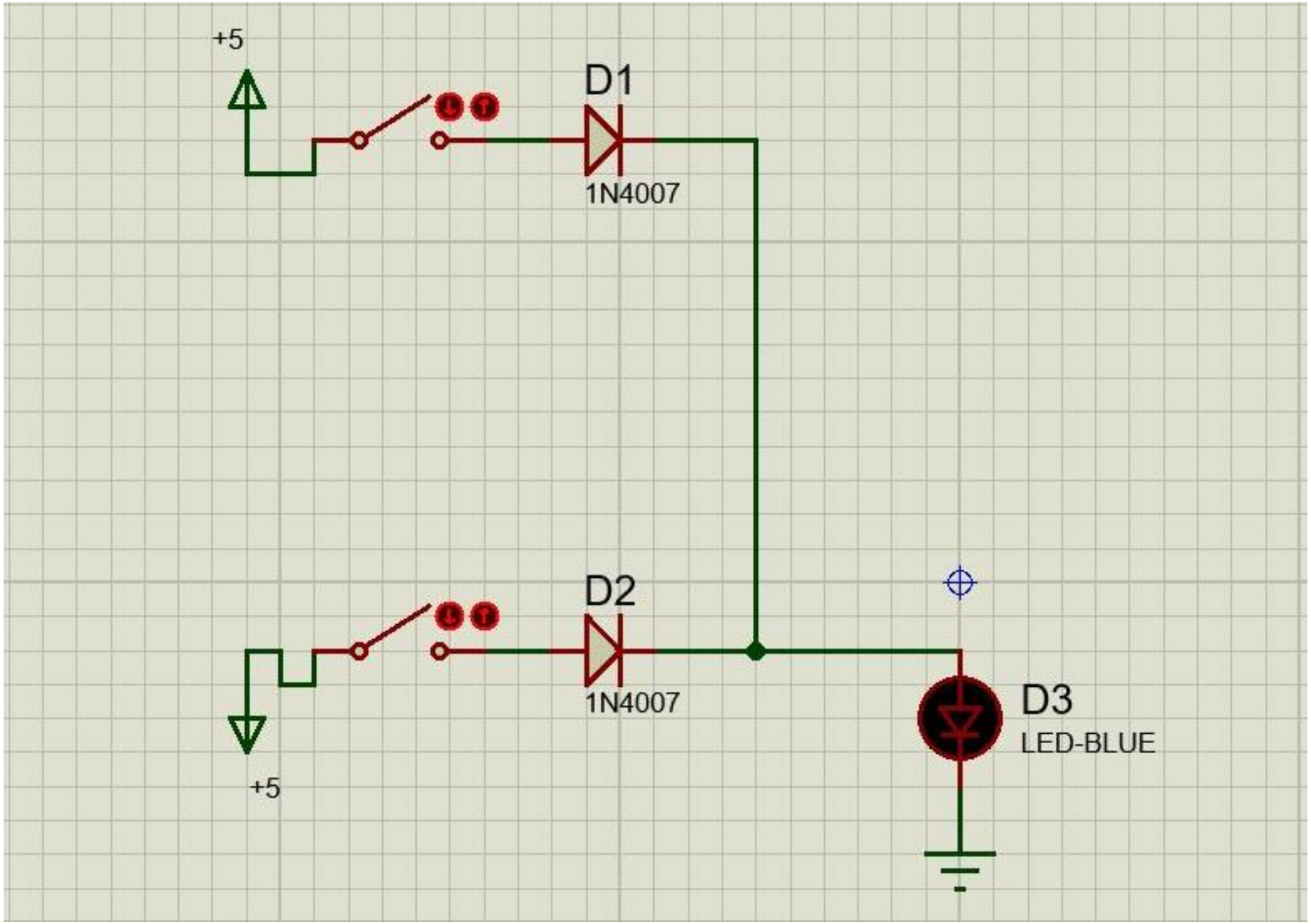
OR gate

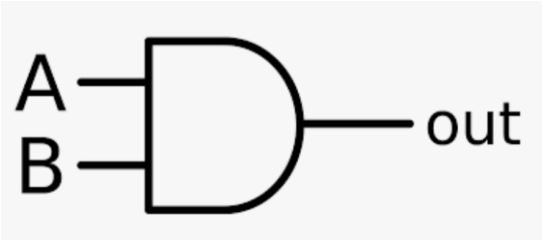


- Is a digital logic gate that implements logical disjunction, returns true if either or both of its inputs are true; otherwise it returns false.
- The input and output states are normally represented by different voltage levels.
- Accepts two inputs. It outputs a 1 if either or both of these inputs are 1, or outputs a 0 only if both inputs are 0. The inputs and outputs are binary digits ("bits") which have two possible logical states. In addition to 1 and 0, these states may be called true and false, high and low and active and inactive

Input		Output
A	B	A OR B
0	0	0
0	1	1
1	0	1
1	1	1

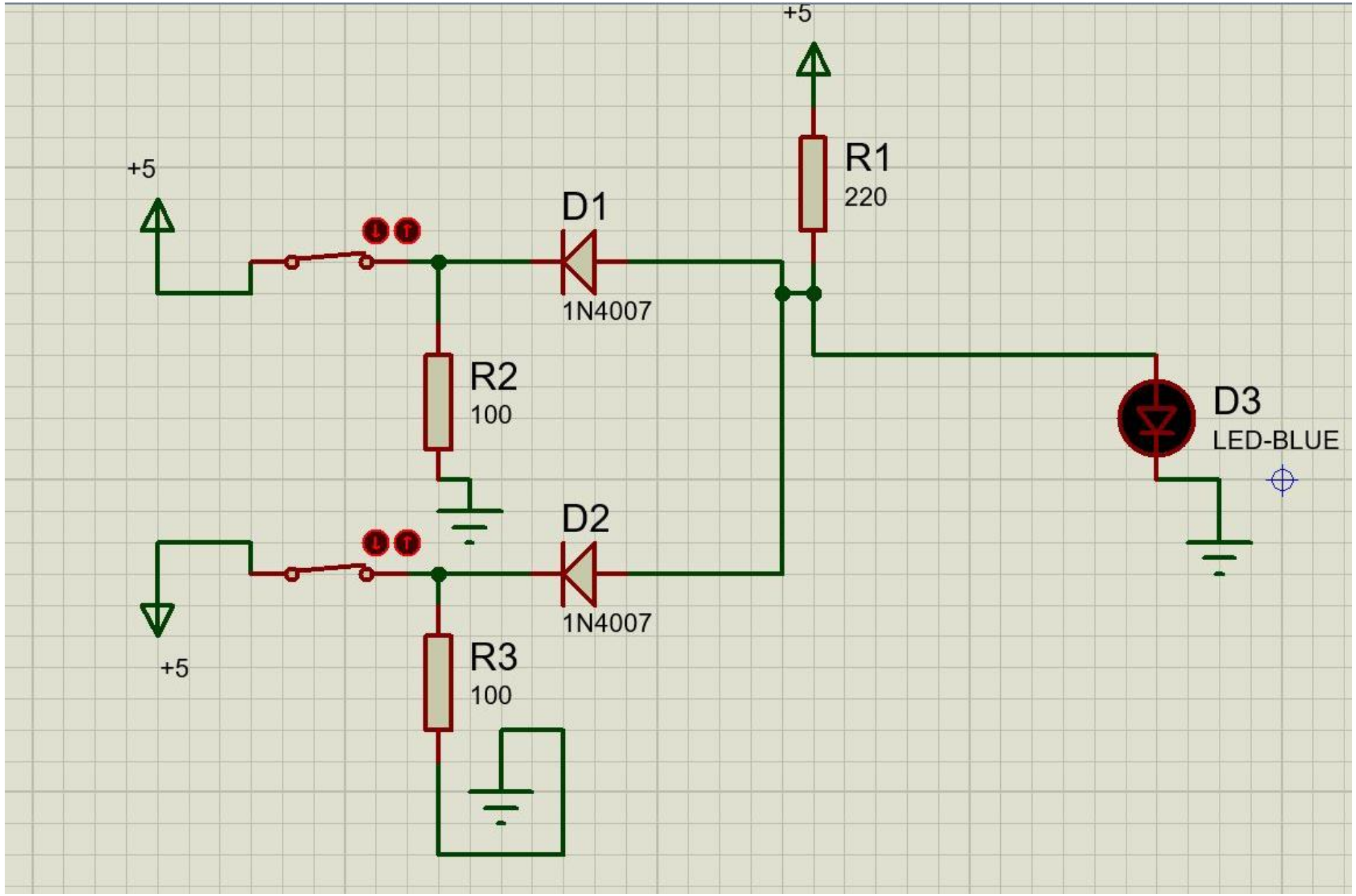

+5
D1
1N4007
D2
1N4007
D3
LED-BLUE
+5

AND gate



- Is a basic digital logic gate that implements logical conjunction – AND gate behaves according to the truth table. A HIGH output (1) results only if all the inputs to the AND gate are HIGH (1). If not all inputs to the AND gate are HIGH, LOW output results.

Input		Output
A	B	A AND B
0	0	0
0	1	0
1	0	0
1	1	1


+5
+5
R1
220
D1
1N4007
R2
100
D3
LED-BLUE
D2
1N4007
+5
R3
100

Enjoy
with
your
Design

Thank You