



UNIVERSITY OF INFORMATION TECHNOLOGY AND SCIENCES (UITS)

LAB REPORT-2

IT-202 : DIGITAL LOGIC DESIGN LAB

OR Gate

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1 OR Gate

An OR gate performs like two switches in parallel supplying a light,so that when either of the switches is closed the light is on.An OR gate is a digital logic gate that gives an output of 1 when any of its inputs are 1, otherwise 0.

2 Related Work

The function of an OR gate is to find the maximum between the inputs which are binary in nature. It is one of the basic gates used in Boolean algebra and electronic circuits like transistor-transistor logic,complementary metal-oxide semiconductors and also use in digital circuit make use of it .

2.1 Inserting Table Example

Input	Input	Output
0	0	0
0	1	1
1	0	1
1	1	1

Table 1: OR Gate

3 Methodology

3.1 Insert Image



Figure 1: OR Gate

4 Results

The OR gate is a digital logic gate that implements logical disjunction (\vee) from mathematical logic – it behaves according to the truth table above. A HIGH output (1) results if one or both the inputs to the gate are HIGH (1). If neither input is high, a LOW output (0) results. In another sense, the function of OR effectively finds the maximum between two binary digits, just as the complementary AND function finds the minimum.

4.1 Output-1

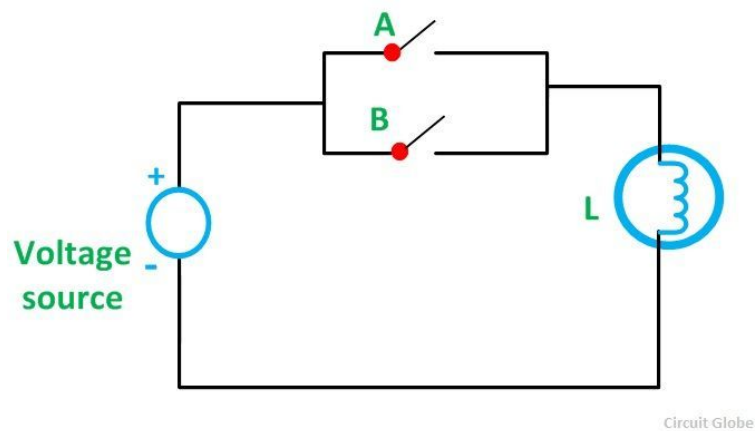


Figure 2: Output-1

5 Conclusion

In this report we learn about OR Gate ,An OR gate is a digital logic gate that gives an output of 1 when any of its inputs are 1, otherwise 0and also known it's working method and how does it works and where it is use and related work and also know the truth table formula and input/output .

References

<https://www.electronics-tutorials.ws/logic/logic4.html>

[https : //www.allaboutcircuits.com/textbook/digital/chpt - 3/not - gate/](https://www.allaboutcircuits.com/textbook/digital/chpt-3/not-gate/)