XNOR using NAND gate

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1 Contents

2 Abstract

This document shows XNOR operation using NAND gates

3 Components

Component	Value	Quantity
Resistor	220 Ohm	1
Led	-	1
Arduino	UNO	1
Bread board	-	1
jumper wires	M-M	3

Table 1: Table 1.0

4 Hardware

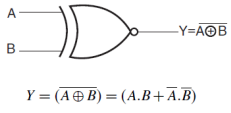
Make the connections as for Table 1.1

Arduino	**13**	**GND**
Led	**+VE**	**-VE**

Table 2: Table 1.1

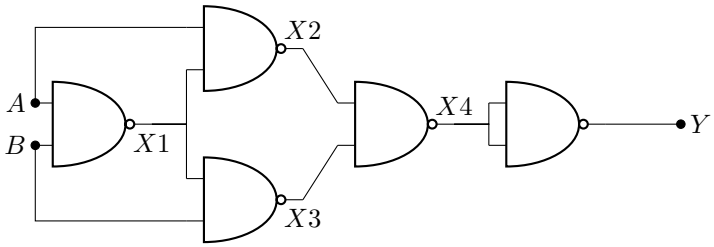
4.1 XNOR Gate Truth Table

The truth table of the XNOR gate is shown below:



A	B	Y
0	0	1
0	1	0
1	0	0
1	1	1

Figure 1



EXPRESSIONS FOR XNOR USING NAND GATE
X1=(A.B)'
X2=(A(A.B)')'
X3=((A.B')')
X4=(A.B')+(A'.B)
Y=((A.B')+(A'.B))'

5 SOFTWARE

PROBLEM1:XNOR USING NAND GATE
Now make the connections as the table 1.1 Execute the f0llowing program after downloading

https://github.com/manasareddy442002/fwc-moudle1/blob/main/code.txt

The LED will ON and oFF according to changing XNOR operation