

BOOLEAN LOGIC THROUGH 7447

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August 2022

REALISING GIVEN CIRCUIT BY USING AVR-GCC LANGUAGE

1 CIRCUIT

For the logic circuit shown in Fig.P2.7, the simplified Boolean expression for the output is....

2 components

3 hardware

4 software

ABSTARCT This manual shows how to use the 7447 BCD- Seven Segment Display decoder to implement Boolean logic.

GIVEN CIRCUIT DIAGRAM

Problem 2.1. Make connections between the seven segment display and the

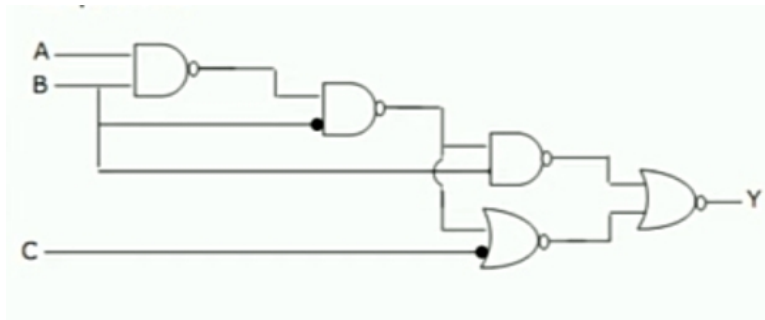


Figure 1: circuit

component	value	quantity
Resistor	220	1
Arduino	UNO	1
Seven segment	-	1
Decoder	7447	1
jumperwires	-	1
breadboard	-	1

Table 1: First table

7447 IC using table 2

...

HARDWARE

7447	!a	!b	!c	!d	!e	!f	!g
hline display	a	b	c	d	e	f	g

Table 2: second table

...

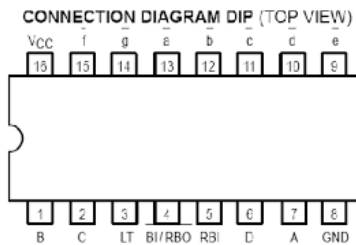


Figure 2: 7447 pin diagram

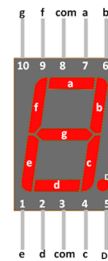


Figure 3: seven segment pin diagram

X,Y,Z taken as inputs,connect arduino pin 2 to A in 7447,connect remaining B,C,D pins of 7447 to ground
Connect VCC (5 pin of arduino) and ground to the circuit

Execute the code provided in the below link

<https://github.com/revsriraj/FWC/avr-gcc-code.c>