

# BOOLEAN LOGIC THROUGH 7447

N.Soundarya

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## 1 CIRCUIT

Write the Boolean Expression for the Result of the Logic circuit shown in figure1....

## 2 components

## 3 hardware

## 4 software

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

...

component	value	quantity
Resistor	220	1
Arduino	UNO	1
Seven segment	-	1
Decoder	7447	1
jumperwires	-	18
breadboard	-	1

Table 1: First table

## COMPONENTS

...

## GIVEN CIRCUIT DIAGRAM

**Problem 2.1.** Make connections between the seven segment display and the 7447 IC using table 2

...

## HARDWARE

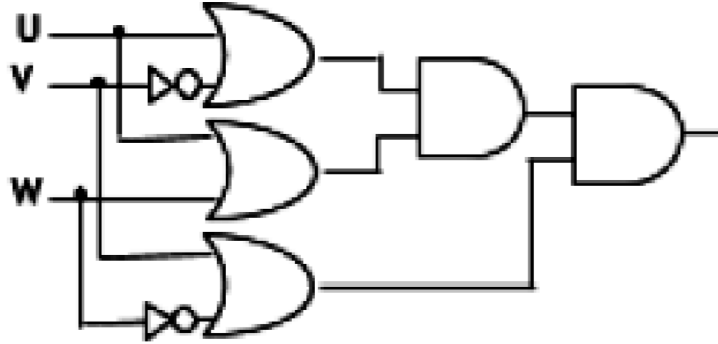


Figure 1:  $F = U(V + !W)$

7447	a'	b'	c'	d'	e'	f'	g'
display	a	b	c	d	e	f	g

Table 2: second table

...

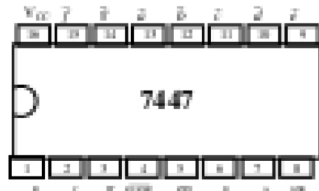


Figure 2: 7447 pin diagram



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/soundaryanaru/FWC-assignments>