POS Expression for Paper 2013 Question 6)c

YADATI KRISHNA

August 30, 2022

Contents

Abstract

This manual shows how to use Arduino with LED to represent POS expression for the function" G "shown in the below truth table.

U	V	W	G
0	0	0	1
0	0	1	0
0	1	0	1
0	1	1	0
1	0	0	1
1	0	1	0
1	1	0	0
1	1	1	1

1 Components

Components	Value	Quantity
Arduino	UNO	1
LED	-	1
Jumper wires	M-M	3
Breadboard		1

2 Hardware

Make connections between the Arduino and LED using Breadboard.

3 Software

Now make the connections as per Table and execute the following program after downloading.

https://github.com/KrishnaYadati/Assignments

LED	pin-1	pin-2
Arduino	2	GND

U, V, W are the inputs and LED is the output.Using boolean logic,

$$G = (U+V+W')(U+V'+W')(U'+V+W')(U'+V'+W) \tag{1}$$