

IDE ASSIGNMENT

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IITH - Future Wireless Communications (FWC)

CONTENTS

1 QUESTION

Consider the minterm list form of a Boolean function F given below.

$$F(P, Q, R, S) = \Sigma(m(0, 2, 5, 7, 9, 11) + d(3, 8, 10, 12, 14)).$$

Here, m denotes a minterm and d denotes a don't care term. The number of essential prime implicants of the Function F is

2 COMPONENTS

Component	Quantity	Values
Arduino	1	UNO
JumperWires	2	M-M
Resistor	1	220
LED	1	1

3 K-MAPS

		$Y_1 Y_0$			
		00	01	11	10
$X_1 X_0$	00	1	0	-	1
	01	0	1	1	0
	11	-	0	0	-
	10	-	1	1	-

4 IMPLEMENTATION

Arduino PIN	lcd
D2	OUTPUT
GND	GND

Connections



Fig. 1: led

5 PROCEDURE AND OUTPUT

1. Connect the circuit as per the above table.
2. connect the led to arduino

<https://github.com/matamgouthami/fwc/blob/main/platformio/src/gou.cpp>

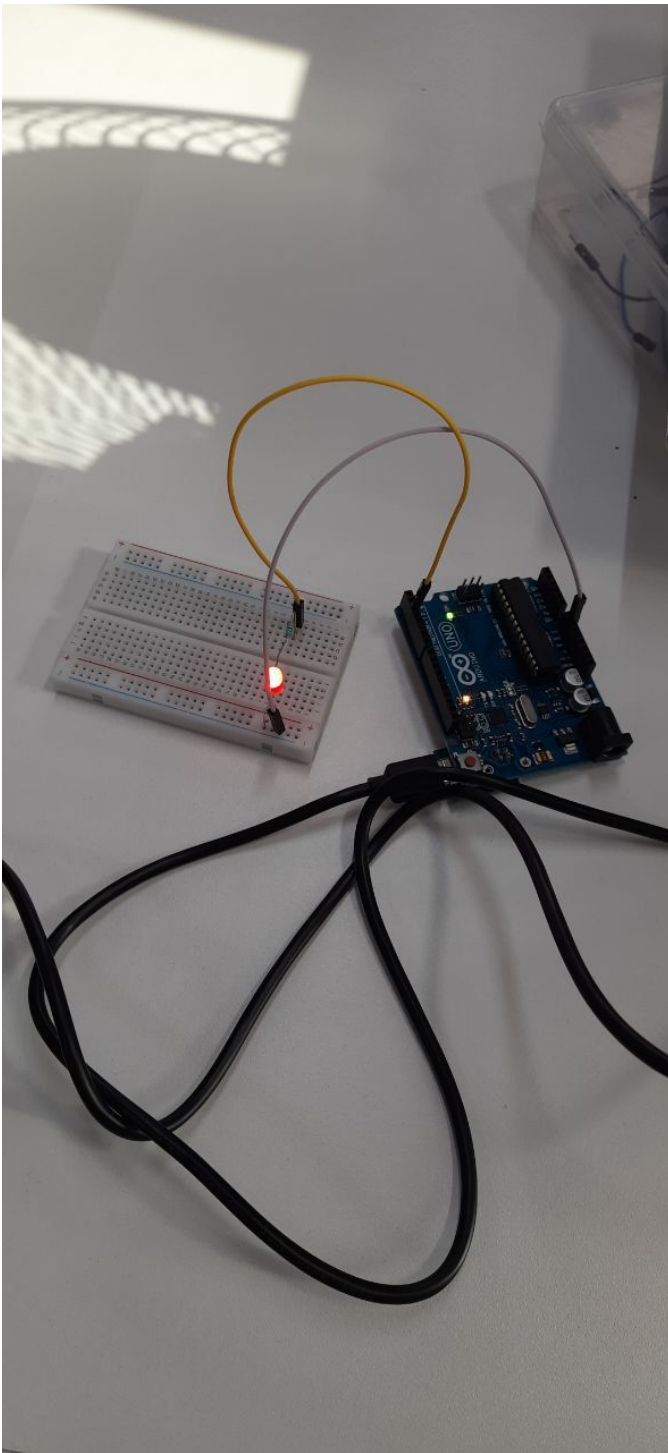


Fig. 2: Arduino connection with led