

Seven Segment Display through Arduino

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I. ABSTRACT

The document shows the connection between the Arduino and Seven segment display.

II. COMPONENTS

The seven segment display as shown in Fig.1 has eight pins, a, b, c, d, e, f, g and dot that take an active *LOW* input, i.e. the LED will glow only if the input is connected to ground. Each of these pins is connected to an LED segment.

The Arduino Uno has some ground pins, analog input pins $A0 - A3$ and digital pins $D1 - D13$ that can be used for both input as well as output. It also has two power pins that can generate $3.3V$ and $5V$. In the following exercises, only the GND , $5V$ and digital pins will be used.

The required components list is given in Table: I. The pin diagram of the seven segment display is shown in Fig.1.

Components	Value	Quantity
Seven Segment Display		1
Arduino	UNO	1
Jumper Wires		10
Breadboard		1

TABLE I

III. PROCEDURE

Make the connections between Arduino and Seven segment display as per the Table: II.

Arduino Pin	Display
D2	a
D3	b
D4	c
D5	d
D6	e
D7	f
D8	g
5 V	COM
gnd	dot

TABLE II

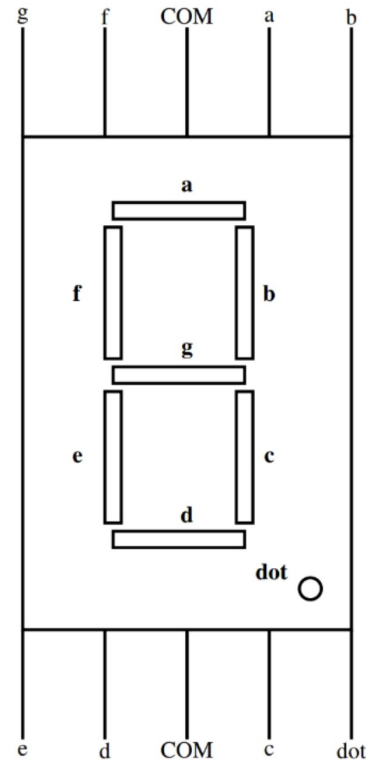


Fig. 1.

IV. RESULTS

Download the code given in the link below and execute them to see the output as shown in Fig.2 by observing in seven segment display.

<https://github.com/Tabassum4930/FWC-1/blob/main/Ide/Seven-seg/Code.cpp>

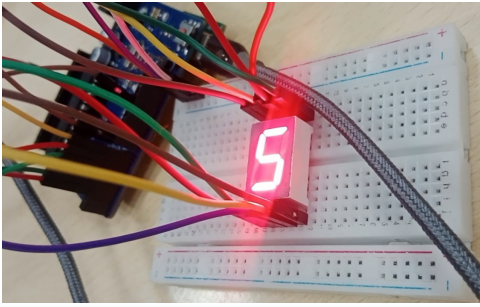


Fig. 2.

V. CONCLUSION

The Seven Segment display can be utilized in several applications in order to observe the outputs. Therefore, it is an essential component in the experimentation of digital circuits.