

Driving Seven Segment Display using Arduino

February 18, 2016

1 Objective

Driving Seven Segment Display by giving input from serial monitor of Arduino

2 Components Required

1. Arduino UNO
2. Bread board
3. Seven segment led display (SSD)
4. Wires

3 Circuit Diagram

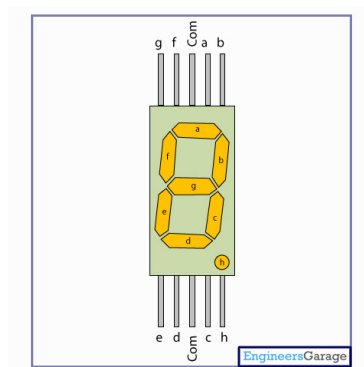


Figure 1: This is the data sheet of Seven Segment Display.

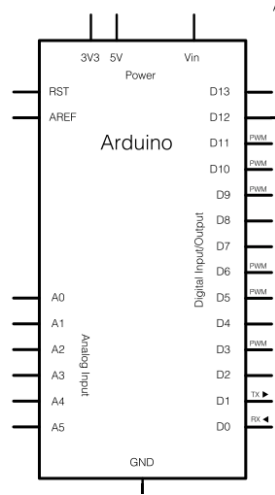


Figure 2: This is the data sheet of Arduino UNO.

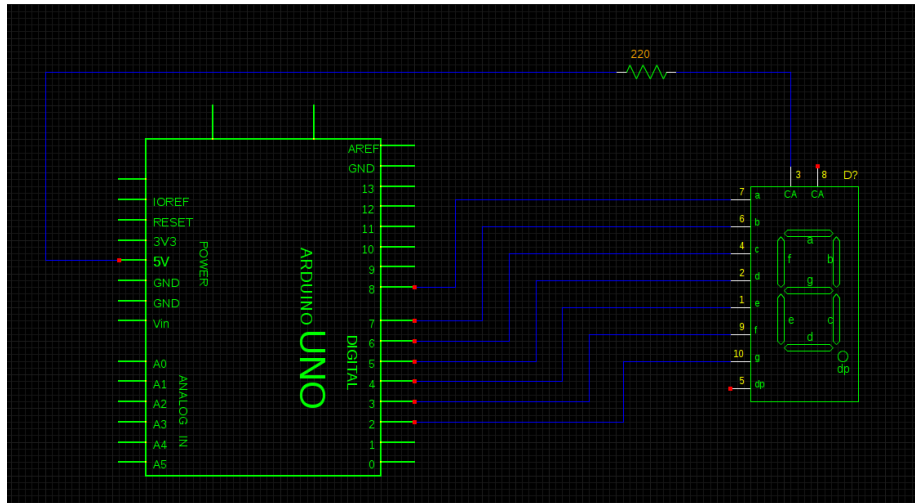


Figure 3: This is the Circuit diagram to Driving Seven Segment Display using Arduino.

4 Description of Circuit

- Our task is to drive Seven Segment Display using Arduino, by giving decimal less than 10 through serial monitor of Arduino software
- For that first we have to convert that number in 4-bit binary number, for that we have written a code in arduino.
- After converting it into 4-bit number, that number is used to write the equations of a, b, c, d, e, f and g (the pins of seven segment display) using K-Maps, for which code is written in arduino.
- Then we feed this into Seven Segment Display through Arduino output pins (which is shown in the above circuit), which glow each segment of the display according to the decimal number given as input in the serial monitor.