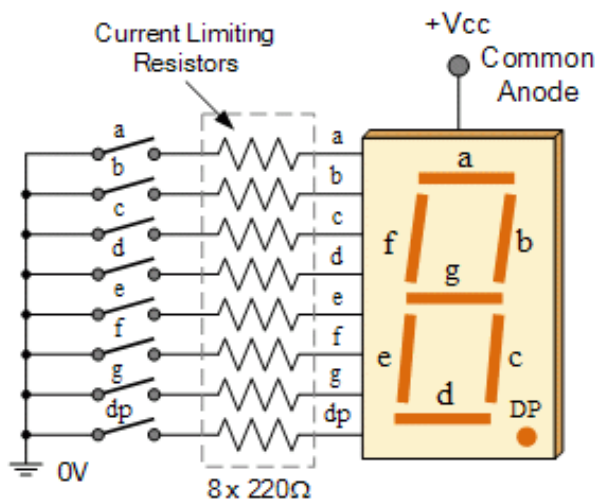


# 7 Segment Display

Report by Devansh Srivastava

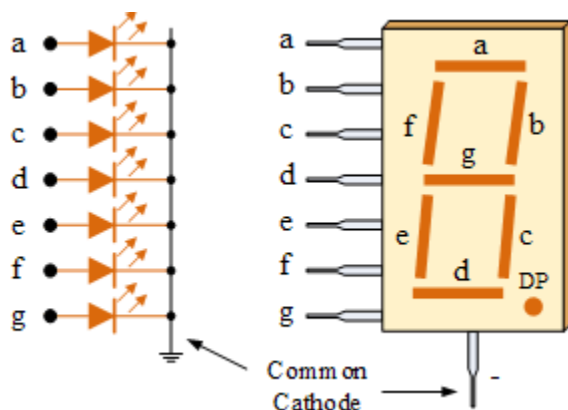
7 Segment Display is a combination of seven LEDs in a rectangular pattern. There is an additional eighth LED to represent the Decimal Point. The entire display has been divided into Segments. There are 7 such segments. Each segment has a LED whose one terminal emerges out of the plastic box of the Segment Display and the other terminal is connected to the other segment LEDs.



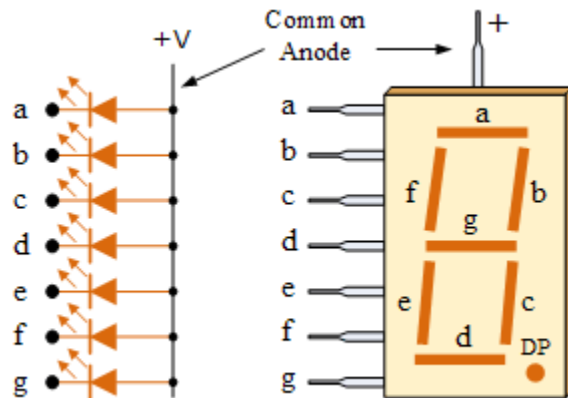
As shown in above diagram, all the segments have been labelled from A to G in spiral.

Two types of 7 Segment Display is- Common Cathode and Common Anode.

- 1- **Common Cathode**- In this, the cathode of all the LEDs is common attached to ground. And individual segment is lighted with the free terminal attached to logic 1 or HIGH.



- 2- **Common Anode**- In this, the anode of all the LEDs is common to logic 1 or HIGH. Other terminal of the individual segment is put at logic 0 or GROUND to lit the segment.



**Truth Table-**

Decimal Number	a	b	c	d	e	f	g
0	h	h	h	h	h	h	
1		h	h				
2	h	h		h	h		
3	h	h	h	h			h
4		h	h			h	h
5	h		h	h		h	h
6	h		h	h	h	h	h
8	H	h	h	h	h	h	h
9	h	h	h			h	h

If common anode, then h is low;  
If common cathode, then h is high.

**Practical Implementation-**

