

## ABSTRACT:

The "Seven Segment Counter Circuit" uses a 555 timer to generate pulses and a 4026 IC to count and display numbers 0–9 on a seven-segment display. It's ideal for simple digital counting applications.

## SEVEN SEGMENT COUNTER CIRCUIT

Applications of the Seven Segment Counter Circuit using 555 Timer and 4026 IC:  
Digital Counters: Used in applications requiring counting items, events, or time intervals.

Timers: Can be used in countdown or count-up timers for various tasks.

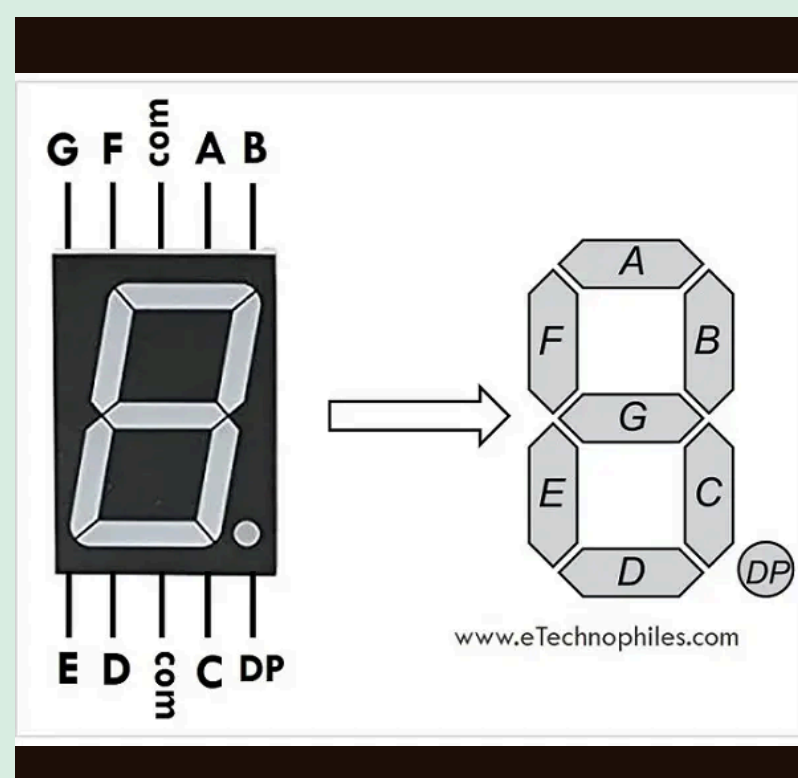
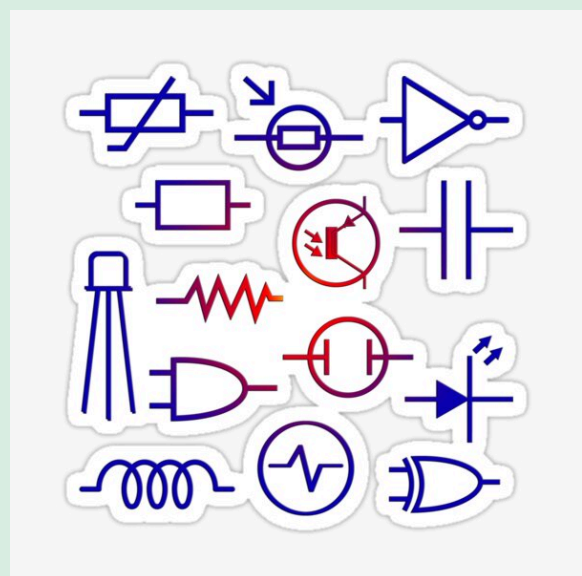
Scoreboards: Suitable for displaying scores in games or competitions.

Frequency Counters: Used in frequency measurement applications.

Educational Tools: Helps students learn about digital electronics, counting circuits, and display interfacing.

## Components:

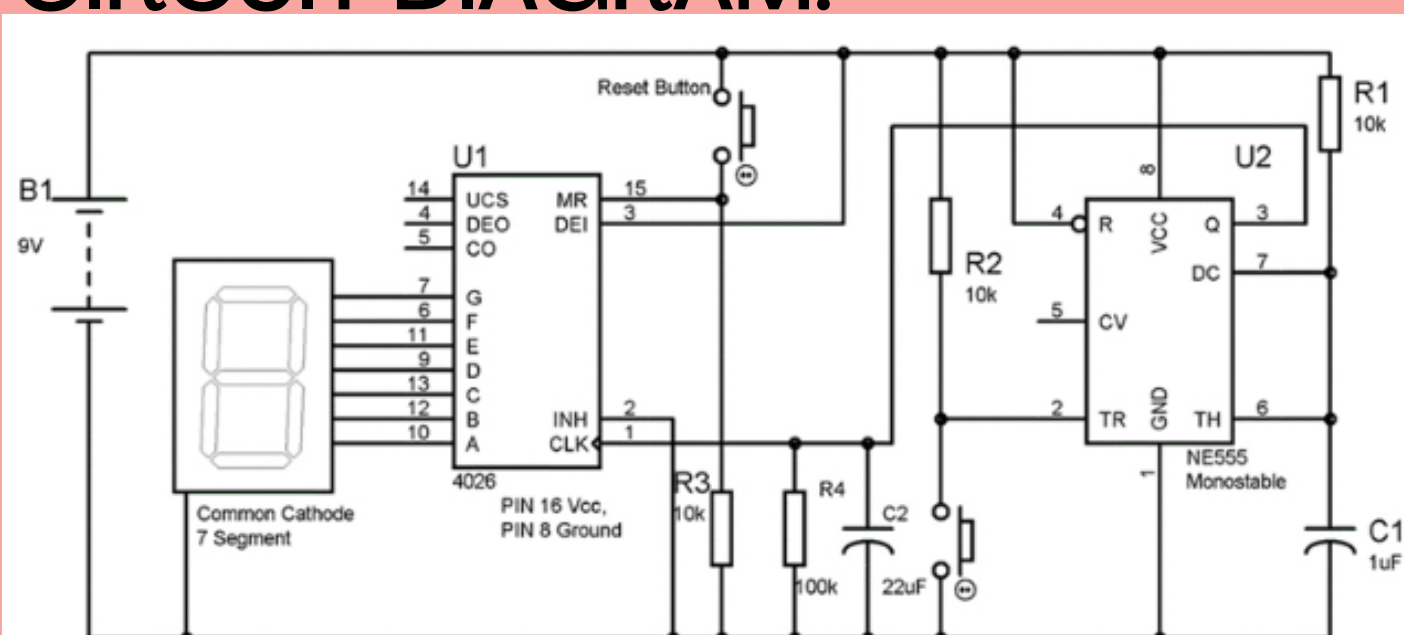
- 1] 55 IC
- 2] 4026 IC
- 3] 220 ohm
- 4] 1K ohm
- 5] 7 segment display
- 6] LED
- 7] 10 $\mu$ F Capacitor
- 8] Connecting Wires
- 9] Potentiometer



## WORKING PRINCIPLE

The circuit operates by using a 555 timer to generate clock pulses, which are sent to the 4026 IC for counting. The 4026 then drives a seven-segment display to show numbers 0–9, with pulse frequency adjustable for counting speed.

## CIRCUIT DIAGRAM:



## TEAM MATES:

ALAN JABA (367)  
ADITYA KOMATH (370)  
ASIMA SHAIK (388)