

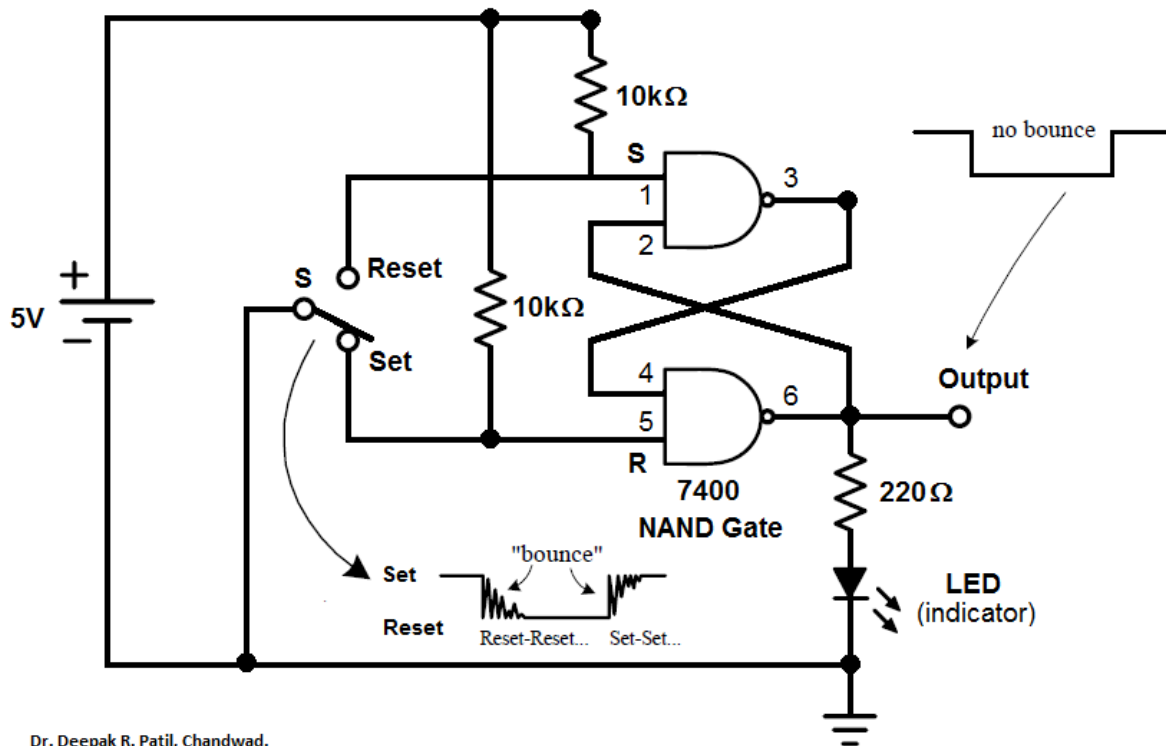
**Title:** Build and Test a Debounce switch using NAND or NOR gate IC.

**Aim:** To study a Debounce switch using NAND gates.

**Components:** IC 7400 (Quad 2-input NAND gates), LEDs, Resistors (220  $\Omega$ , 10k  $\Omega$ ).

**Equipment's & Miscellaneous:** Regulated DC Power Supply (0-25V), DMM, SPDT Switch, Breadboard, Connecting wires, etc.

**Circuit Diagram:**



**Observation Table:**

Sr. No	Switch Position	Output (LED)
1.	Set (ON)	ON
2.	Reset (OFF)	OFF

**Result:**

A Debounce switch using NAND gates is studied and verified its truth table successfully.

*(Do not write on Practical Sheet)*

**Precautions:**

1. Always connect ground first and then connect Vcc.
2. The kit should be off before changing the connections.
3. Switch off the kit after the experiment.

**Procedure:**

1. Connect the circuit as shown in the diagram.
2. Set Switch S to Set position and observe output.
3. Set Switch S to Reset position and observe output.