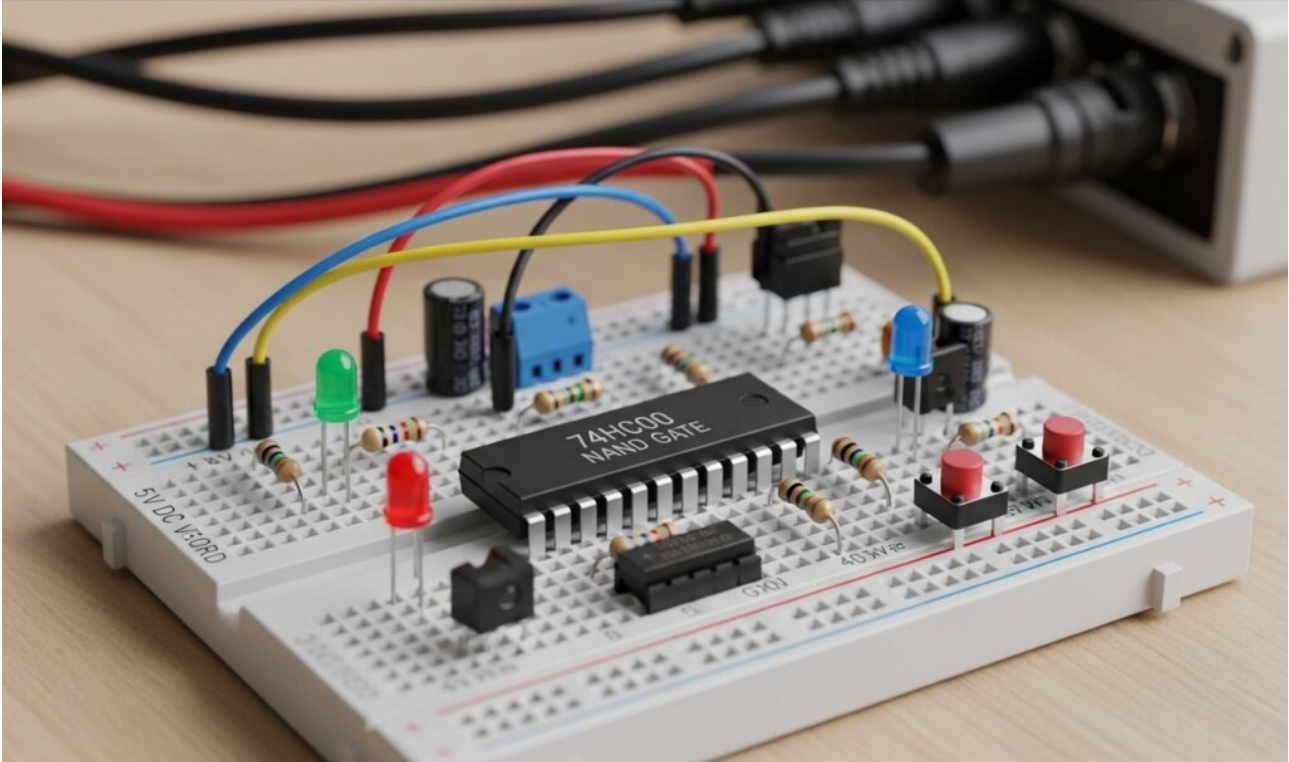


Practical case: Dual Safety Motor Activation

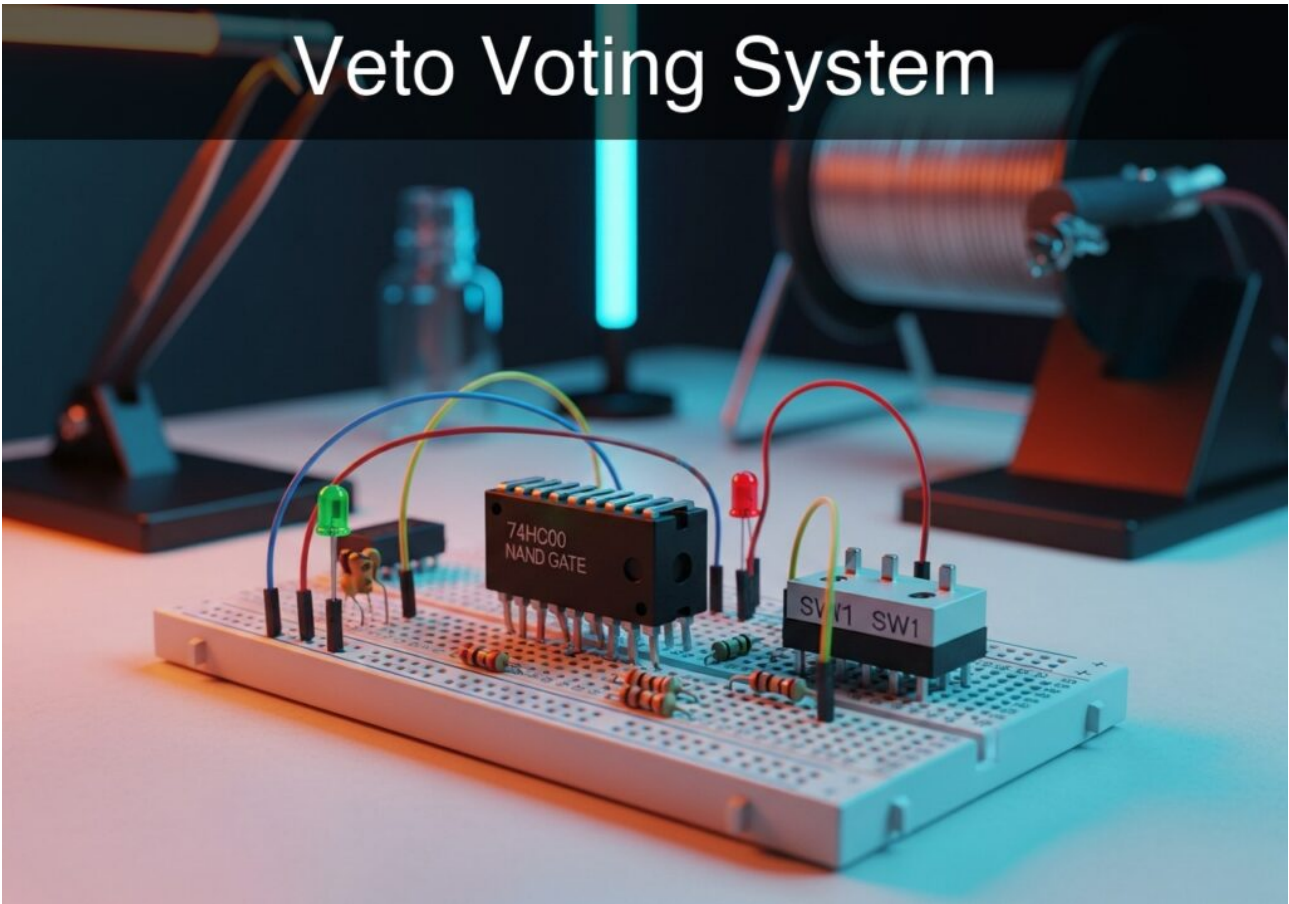
Dual Safety Motor Activation



Learn Digital Electronics by building a safety circuit with a NAND gate. Create a two-hand motor control system that activates 5V output only on dual press.

Practical case: Veto Voting System

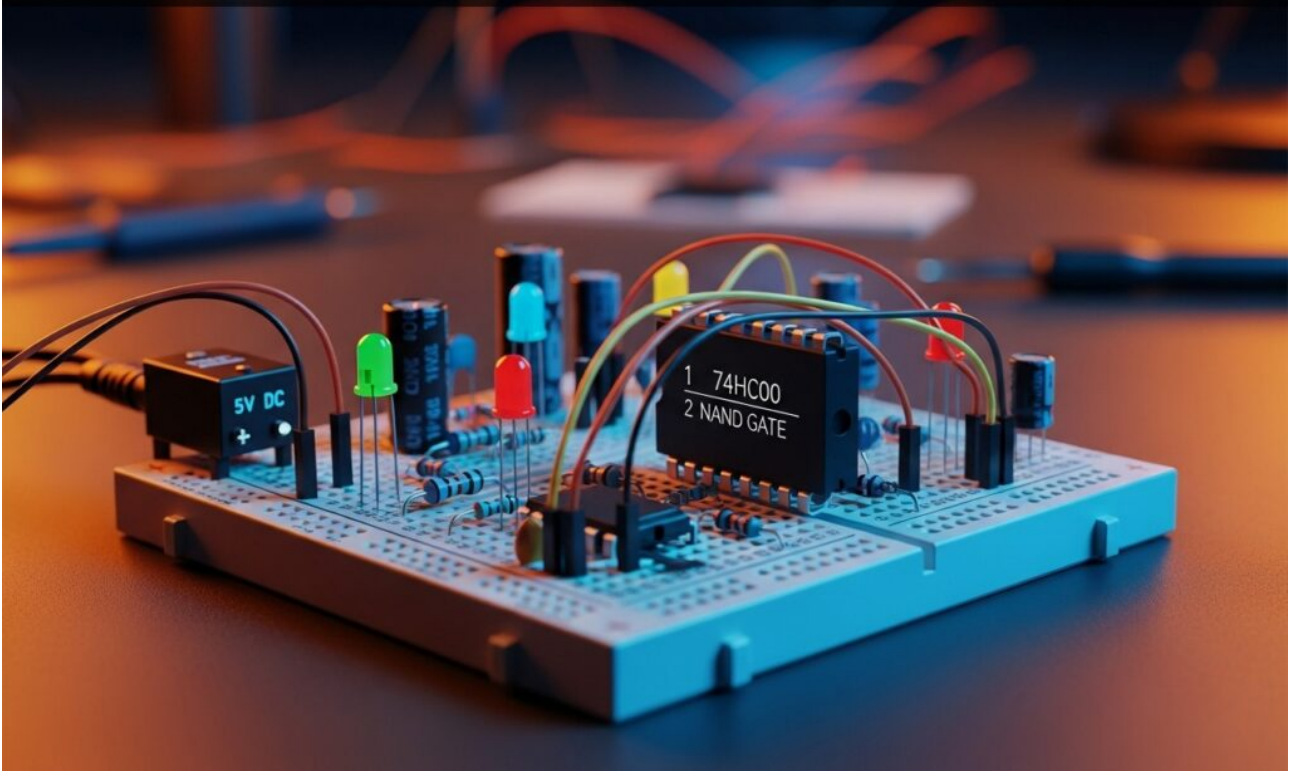
Veto Voting System



Master Digital Electronics by building a voting system using a single 74HC00 NAND gate IC. Create a safety interlock circuit where LED output signals approval.

Practical case: Water tank level control

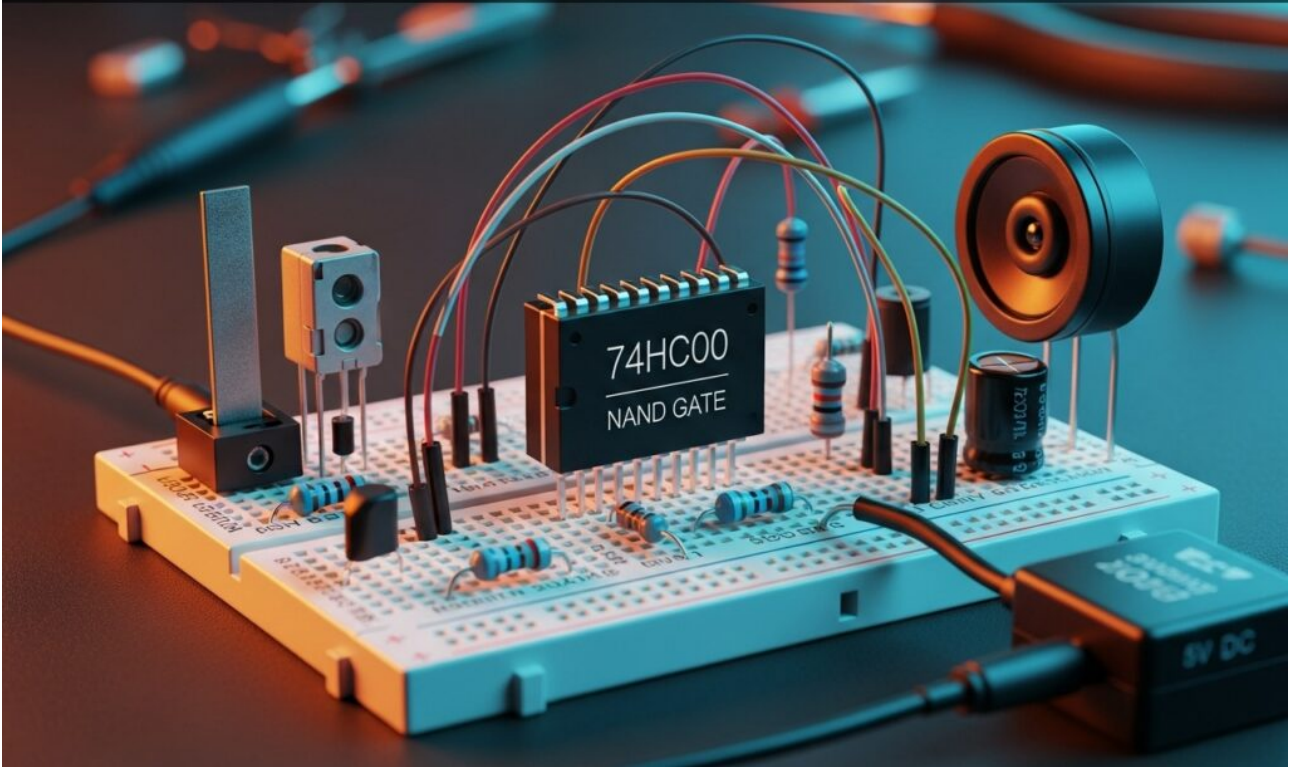
Water tank level control



Learn Digital Electronics by building a pump safety stop using a NAND gate. Design a circuit that cuts power to 0V only when two sensors detect a full tank.

Practical case: Window sensor security alarm

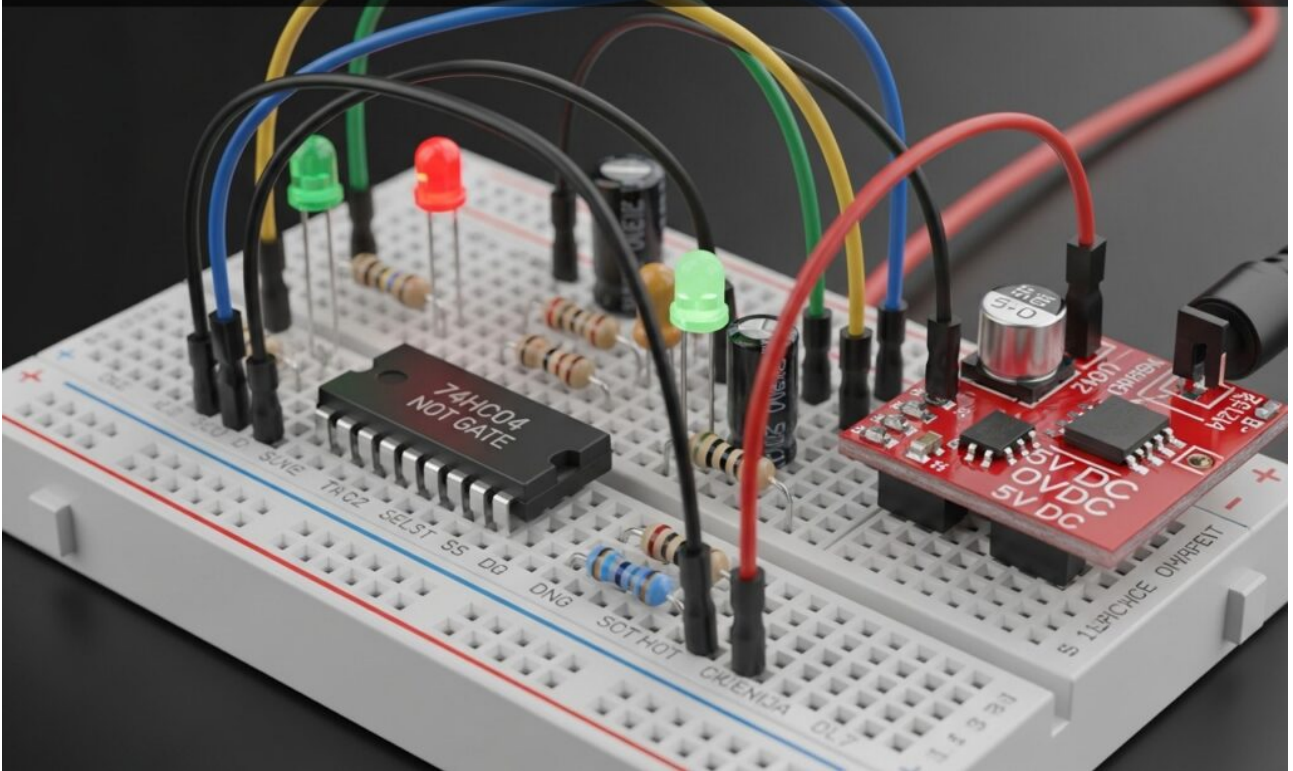
Window sensor security alarm



Master Digital Electronics by building a fail-safe alarm with a NAND gate. Detect open windows and trigger a 5V LED signal instantly when security is breached.

Practical case: Empty Tank Level Indicator

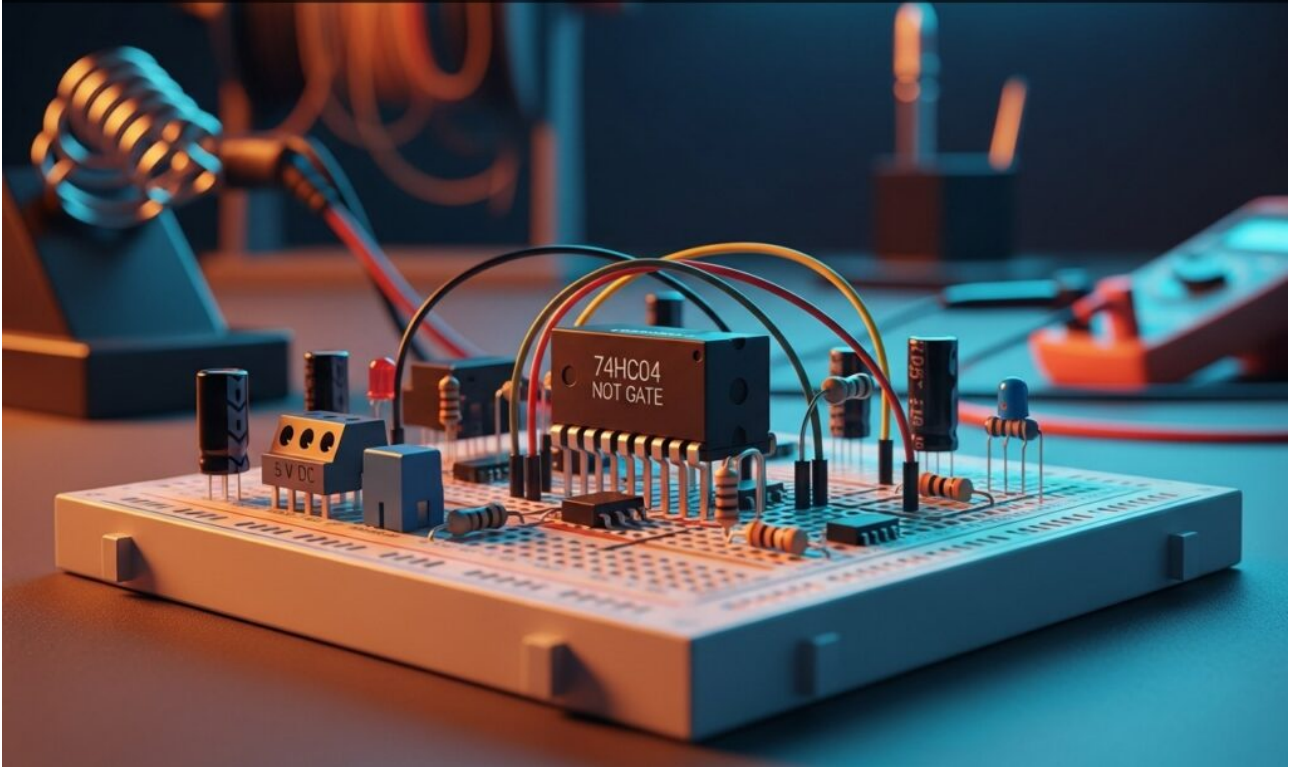
Empty Tank Level Indicator



Master Digital Electronics by building a water level alarm with a NOT gate. Design a circuit that lights an LED when tanks empty, preventing pump damage.

Practical case: Emergency deactivation

Emergency deactivation



Learn Digital Electronics by building a safety kill switch using a NOT gate. Create a circuit where pressing a button instantly cuts the Ready signal voltage.