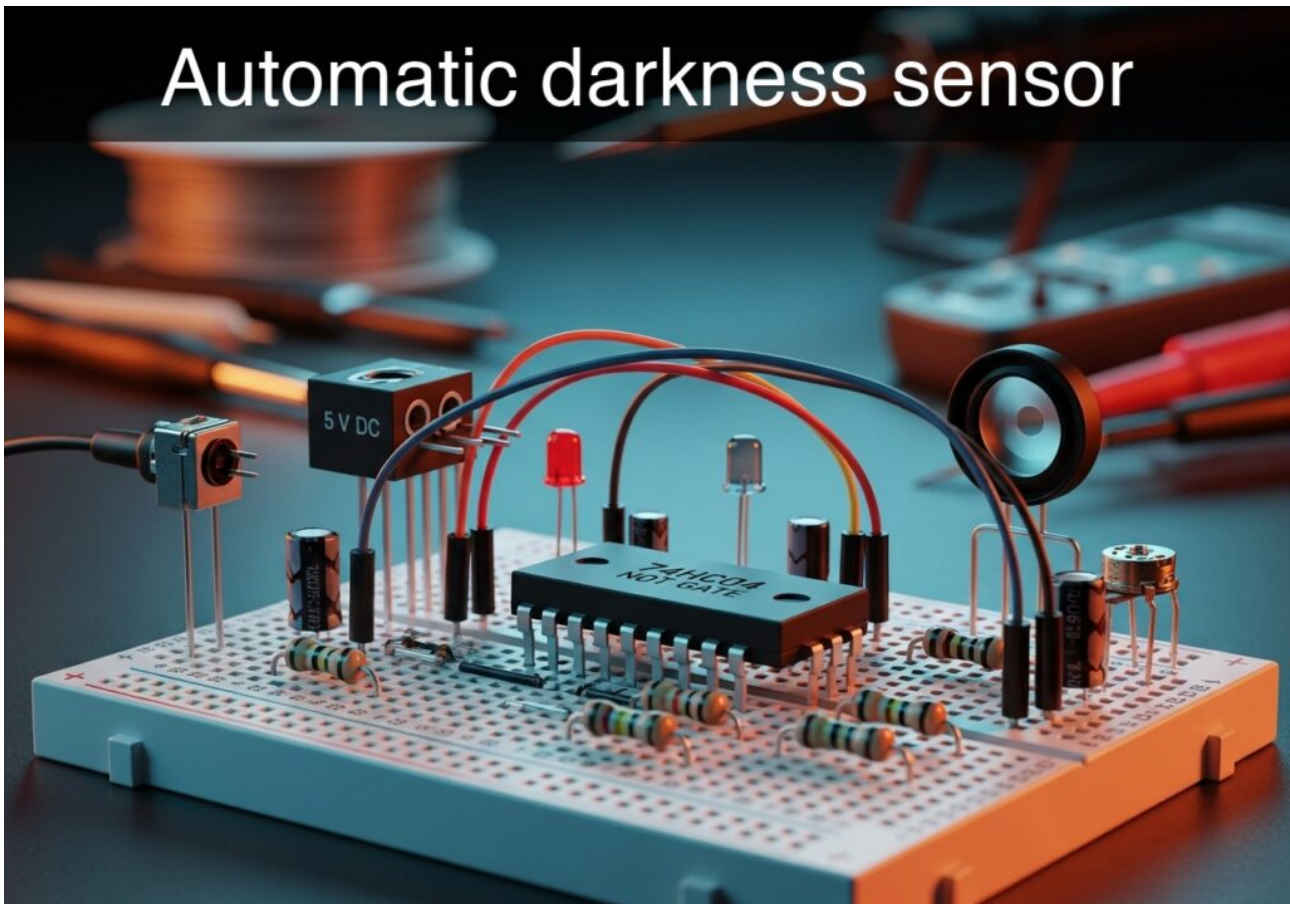


## Practical case: Automatic darkness sensor

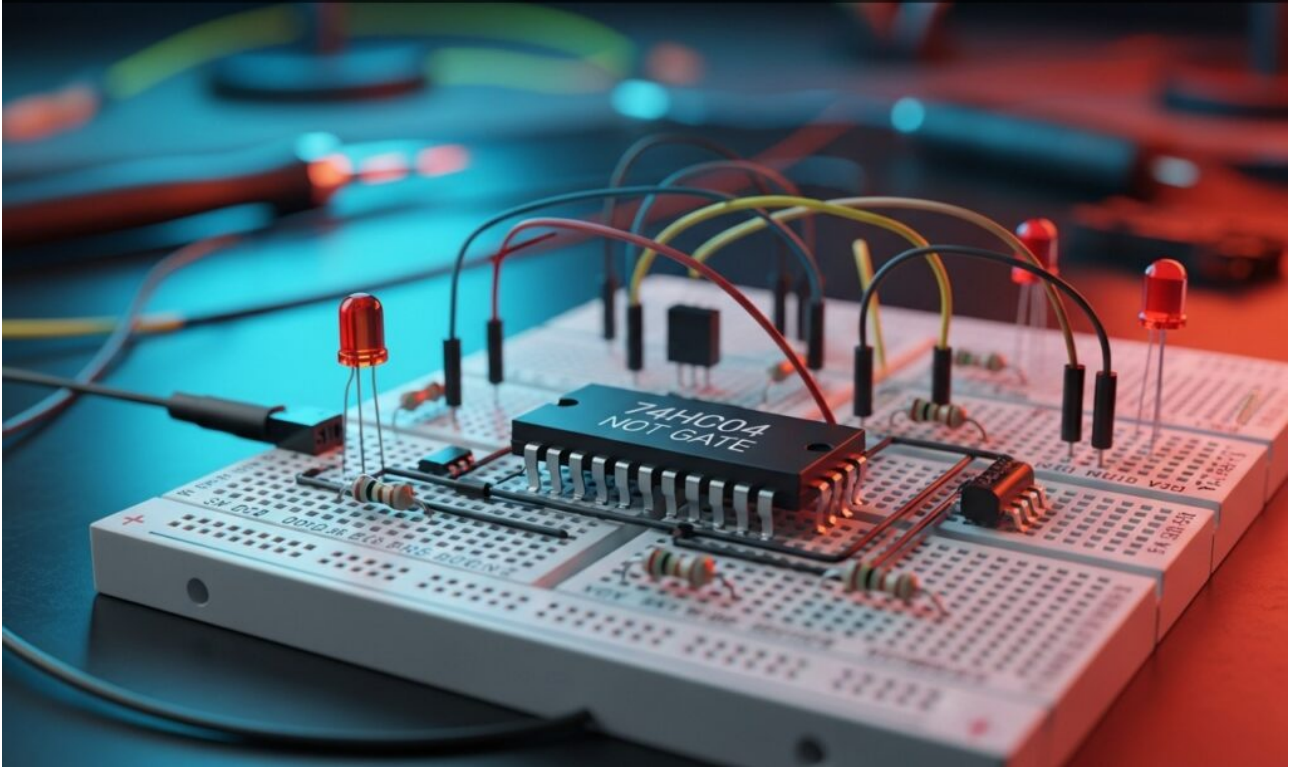


Master Digital Electronics by building an automatic night light. Use a NOT gate and LDR to detect darkness and trigger an LED, learning practical sensor logic.

---

## Practical case: Open door alarm

# Open door alarm

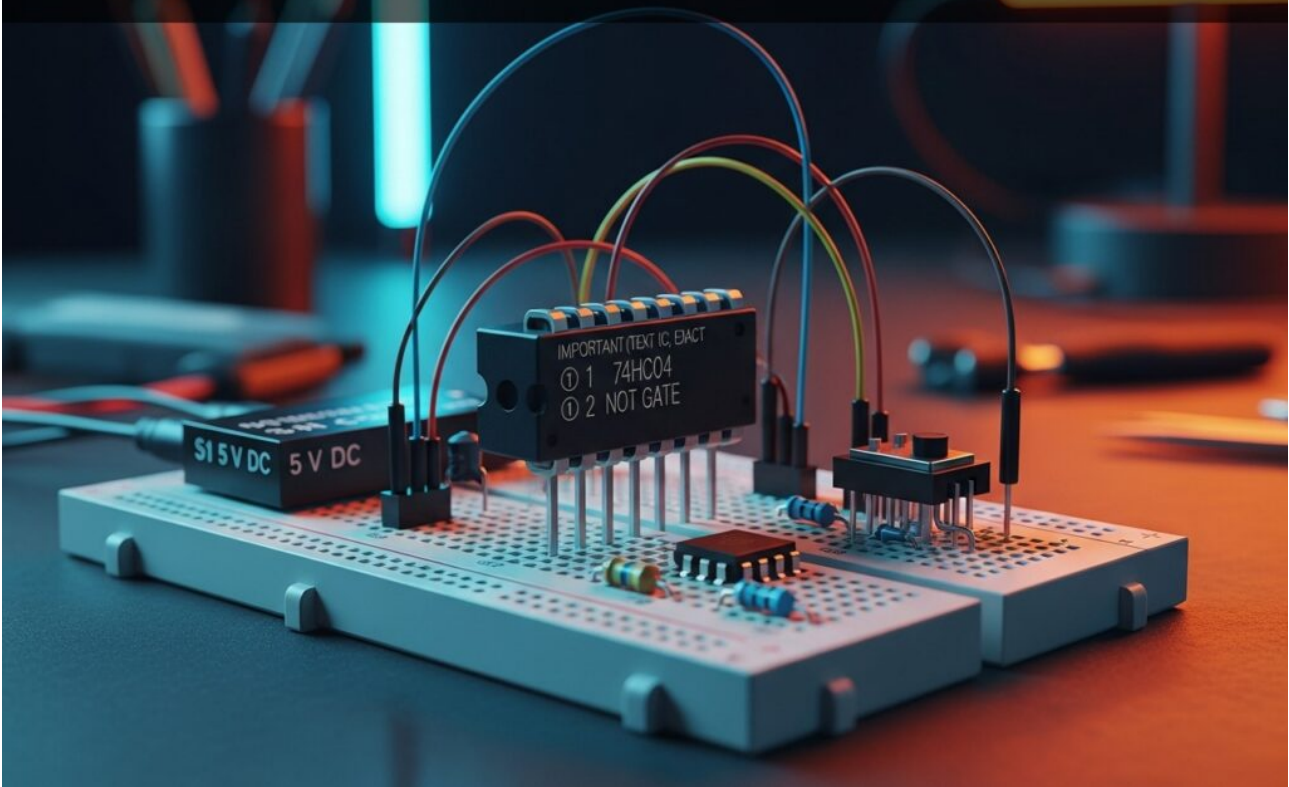


Master Digital Electronics by building a security circuit with a NOT gate. Learn to trigger an LED warning signal instantly when a switch contact opens.

---

## Practical case: Signal inverter with indicator LED

# Signal inverter with indicator LED

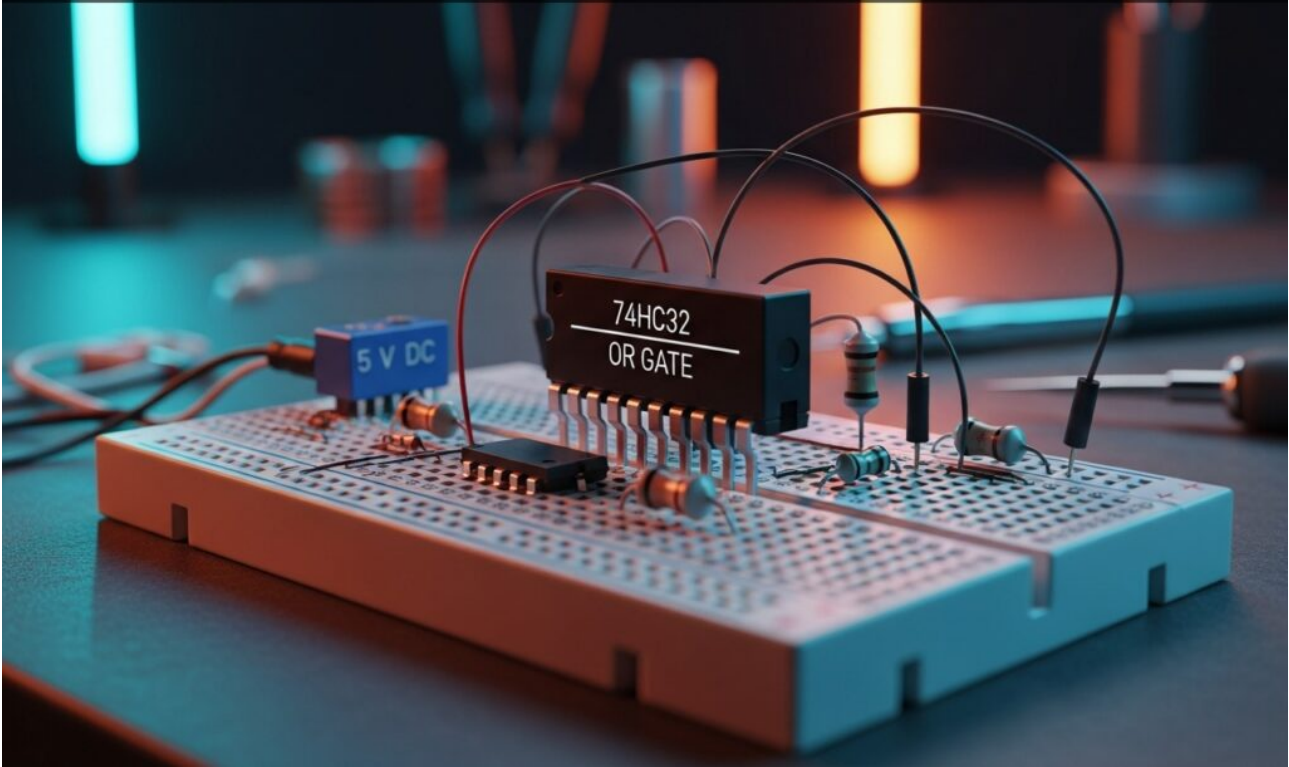


Master Digital Electronics by building a safety interlock circuit with a NOT gate. Learn to invert logic signals and control LED indicators for real-world...

---

**Practical case: Emergency water pump activation**

# Emergency water pump activation

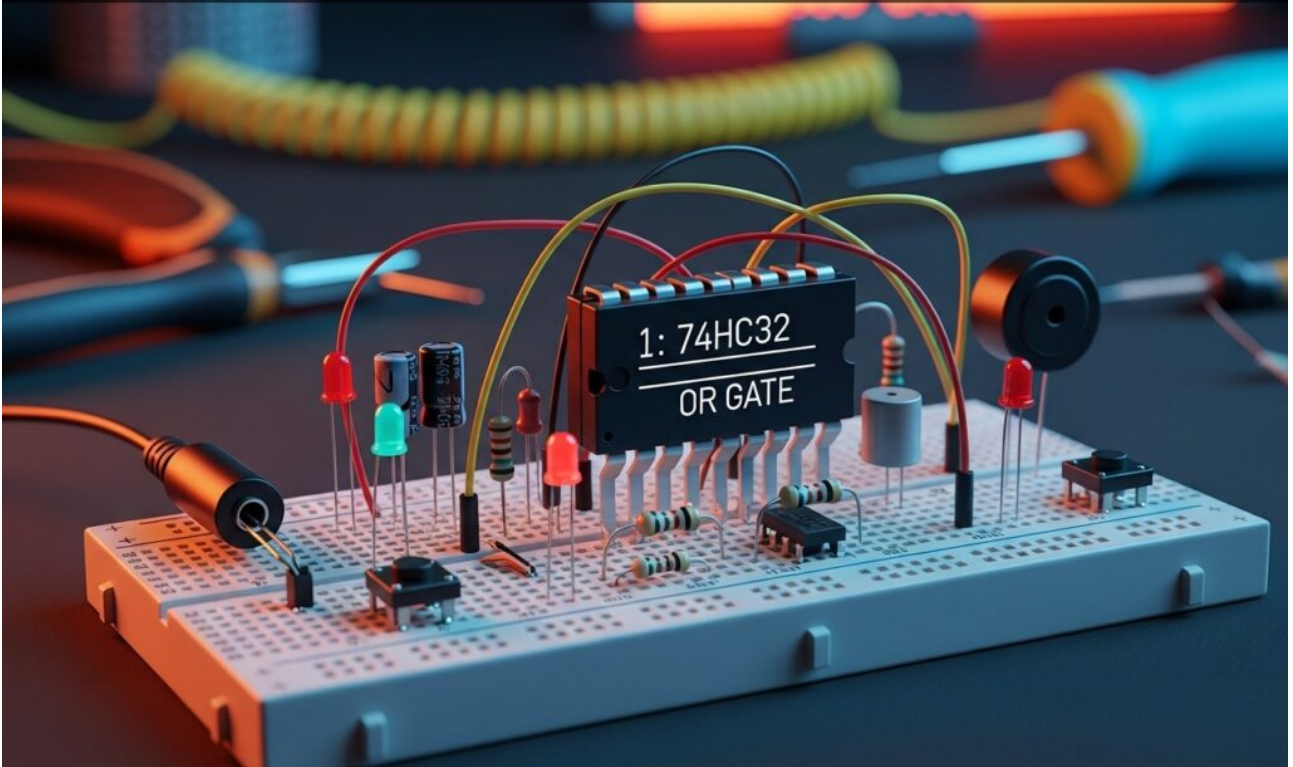


Master Digital Electronics by building a flood prevention system. Use an OR gate to activate a drainage pump when water sensors trigger a 5V logic signal.

---

## **Practical case: Car Door Open Warning System**

# Car Door Open Warning System

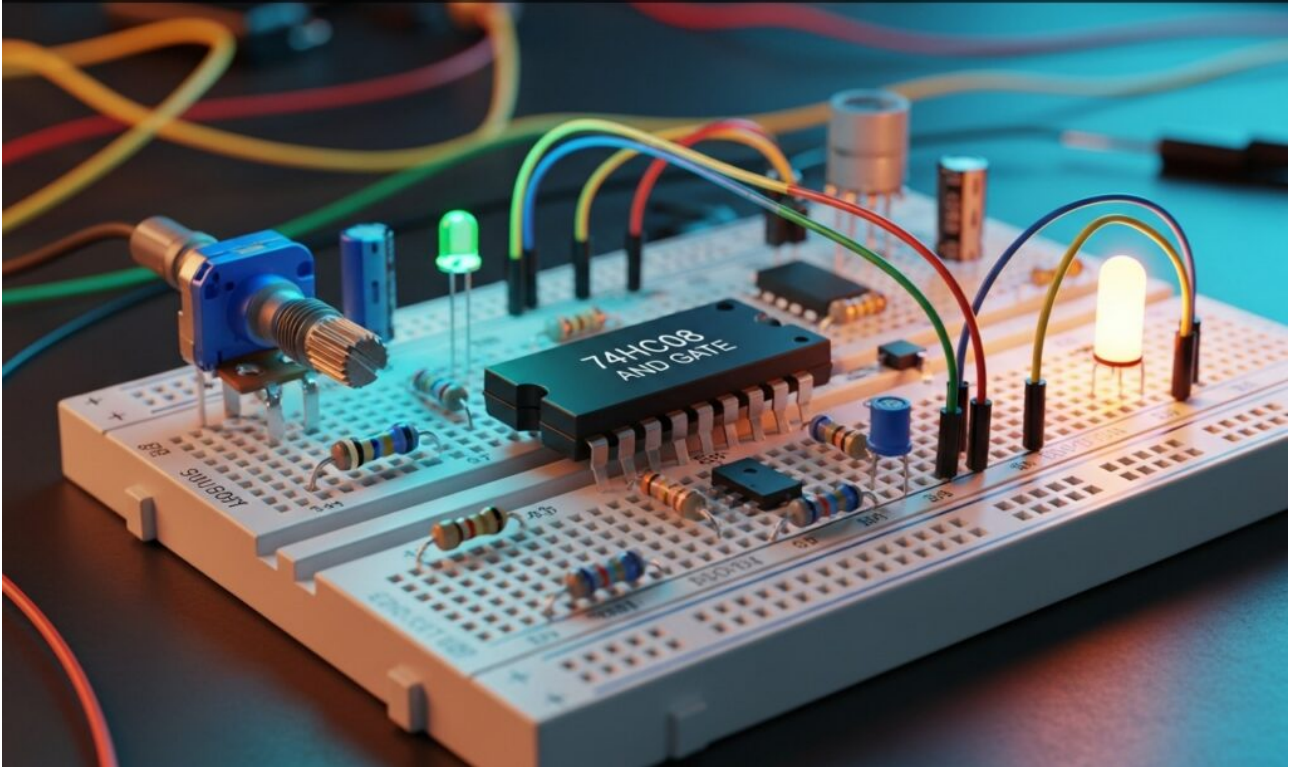


Master Digital Electronics by building a car door alarm with a 74HC32 OR gate. Learn to detect open circuits and trigger LED alerts for safer security systems.

---

**Practical case: Conditional automatic irrigation system**

# Conditional automatic irrigation system



Master Digital Electronics by building a smart irrigation controller with a 74HC08 AND gate. Create a safety circuit that activates a pump only when safe.