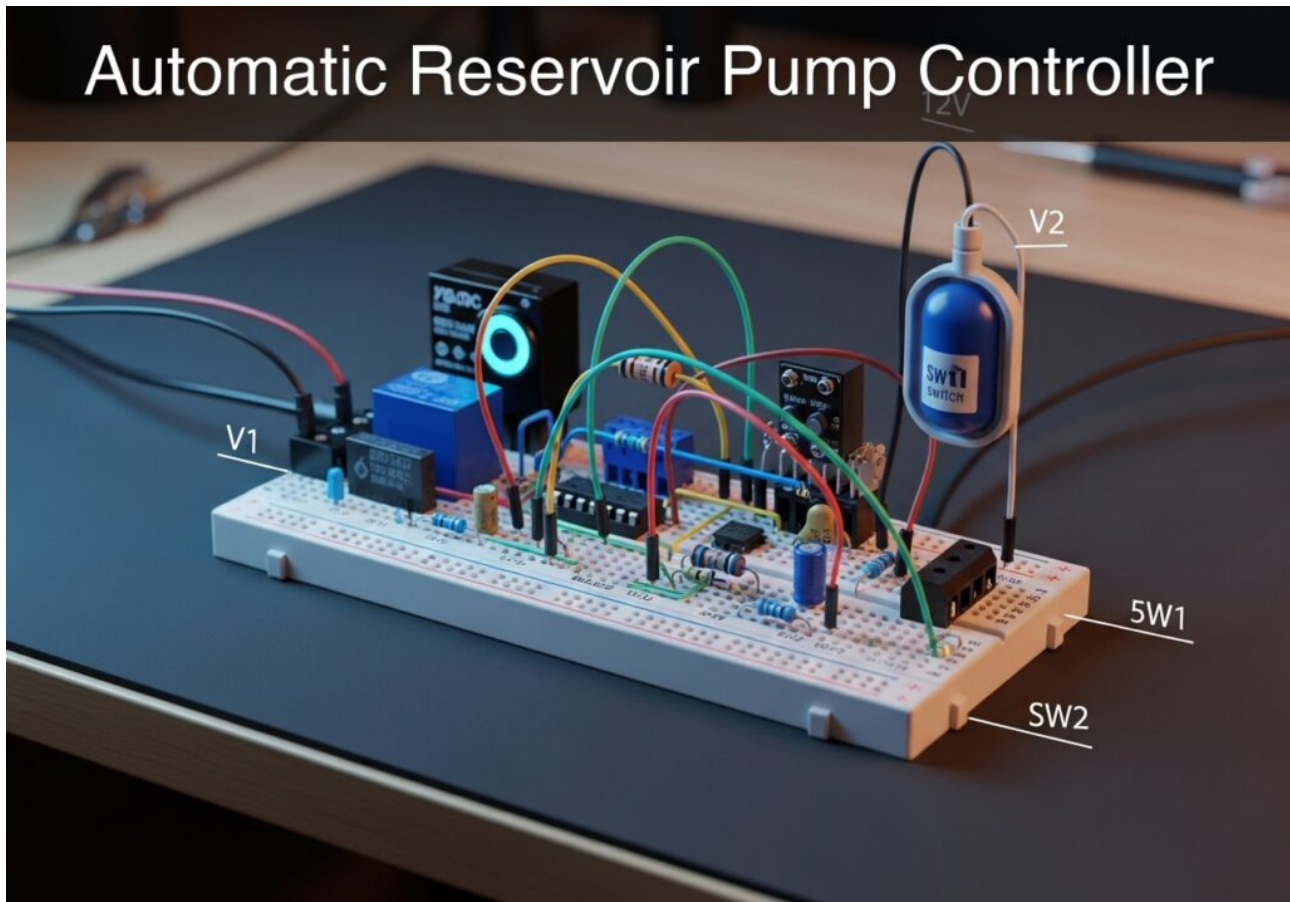


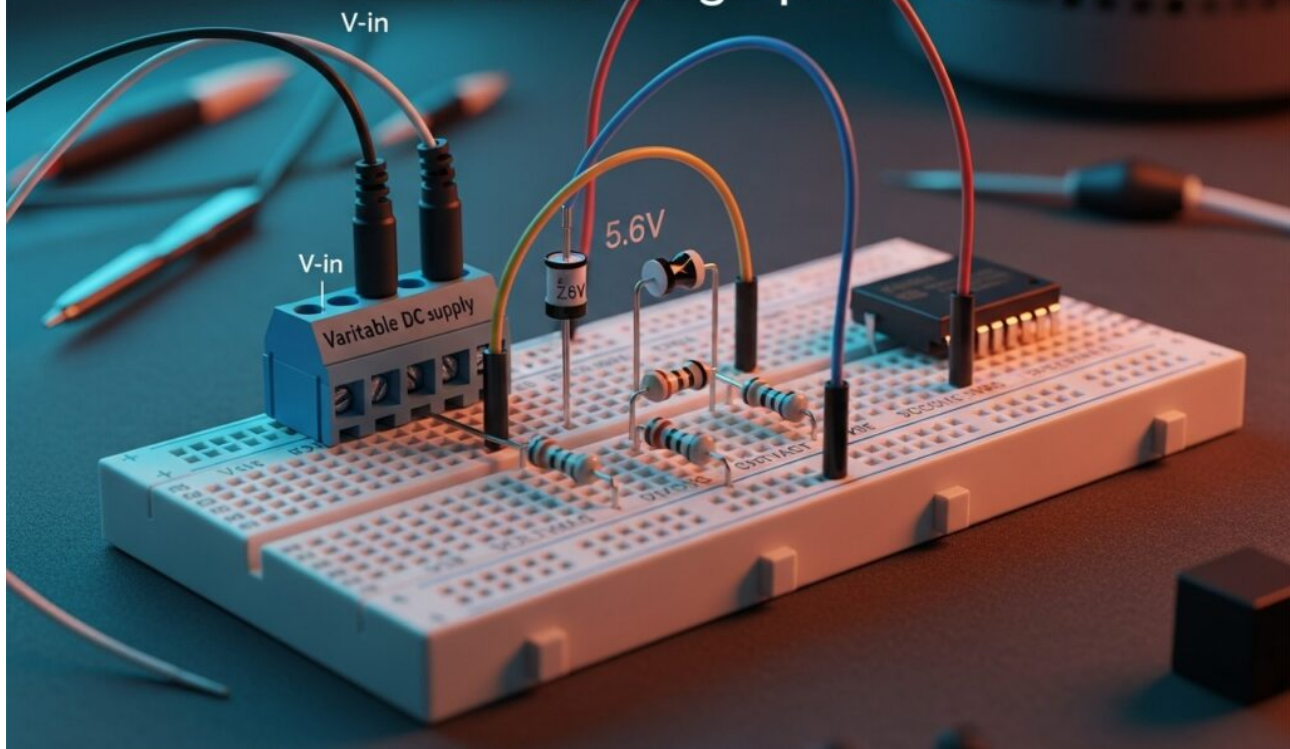
Practical case: Automatic Reservoir Pump Controller



Level: Medium | Construct a transistor-driven relay circuit to automatically control a water pump using a float switch.

Practical case: Overvoltage protection

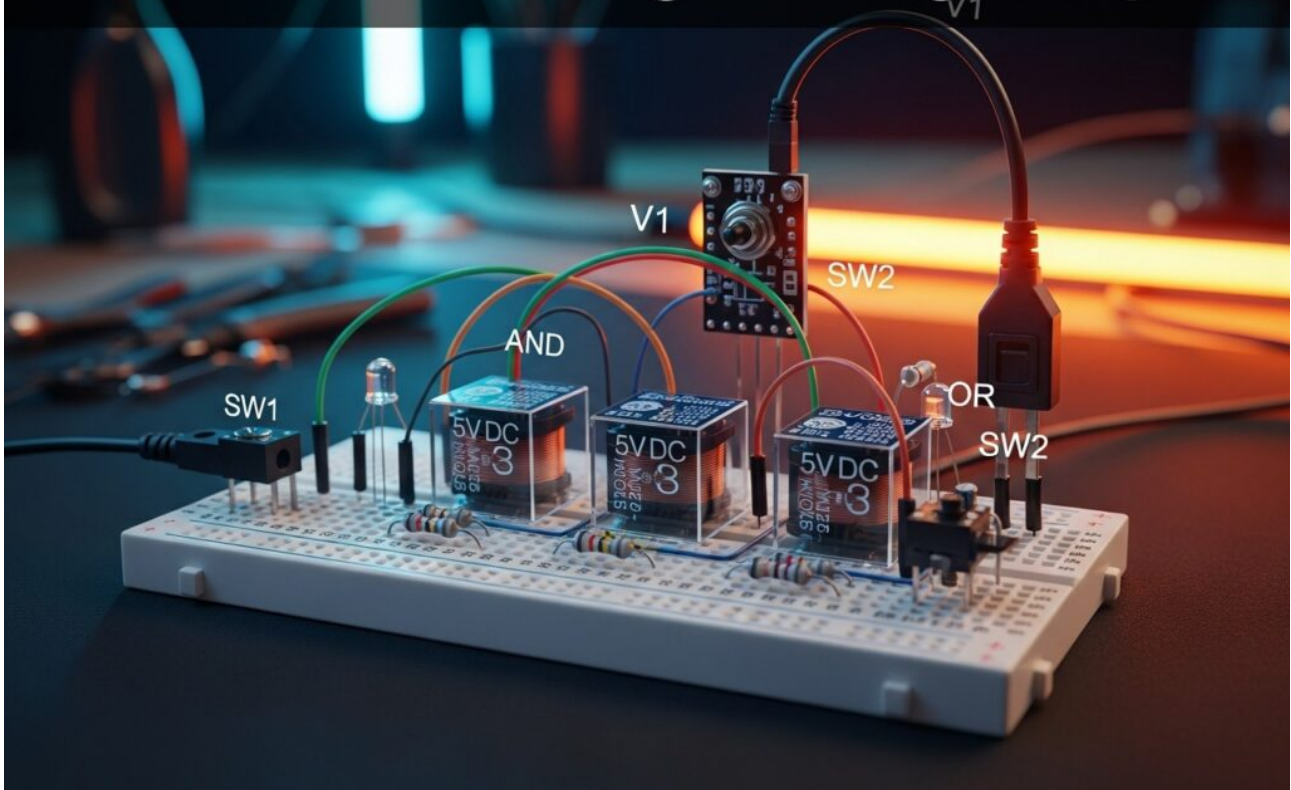
Overvoltage protection



Level: Medium - Disconnect a critical load using a normally closed relay contact when a voltage threshold is exceeded.

Practical case: AND and OR logic using relays

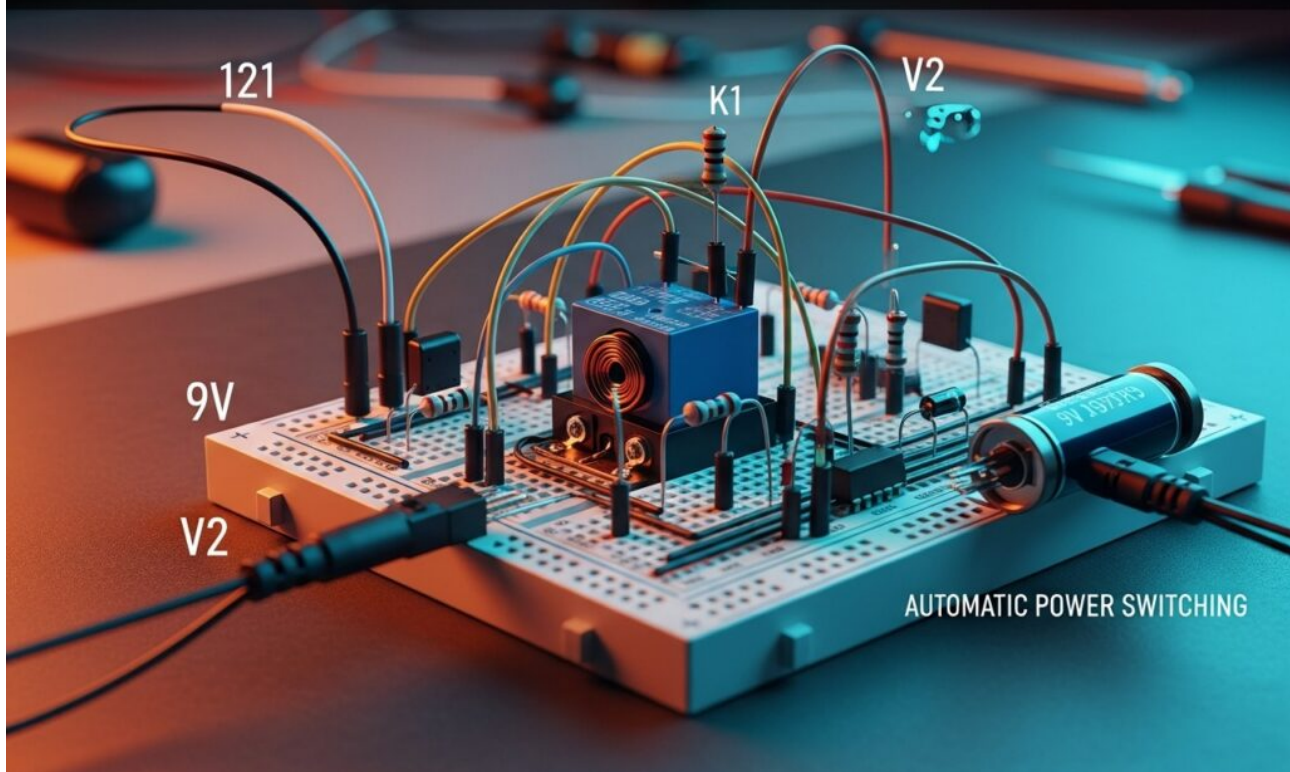
AND and OR logic using relays



Level: Medium - Build basic logic gates by wiring the contacts of multiple relays in series and parallel.

Practical case: Automatic power switching

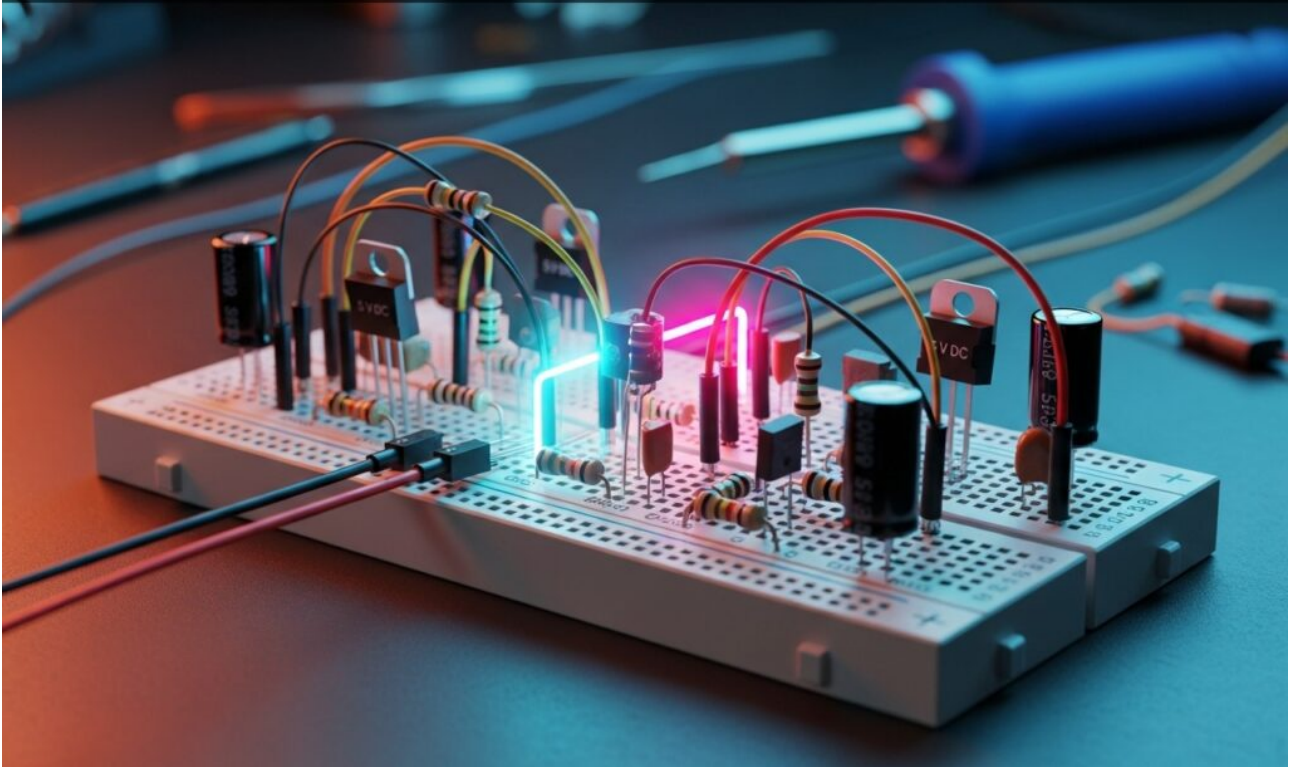
Automatic power switching



Level: Medium - Implement an SPDT relay to automatically alternate between a main power supply and a backup battery.

Practical case: High power circuit isolation

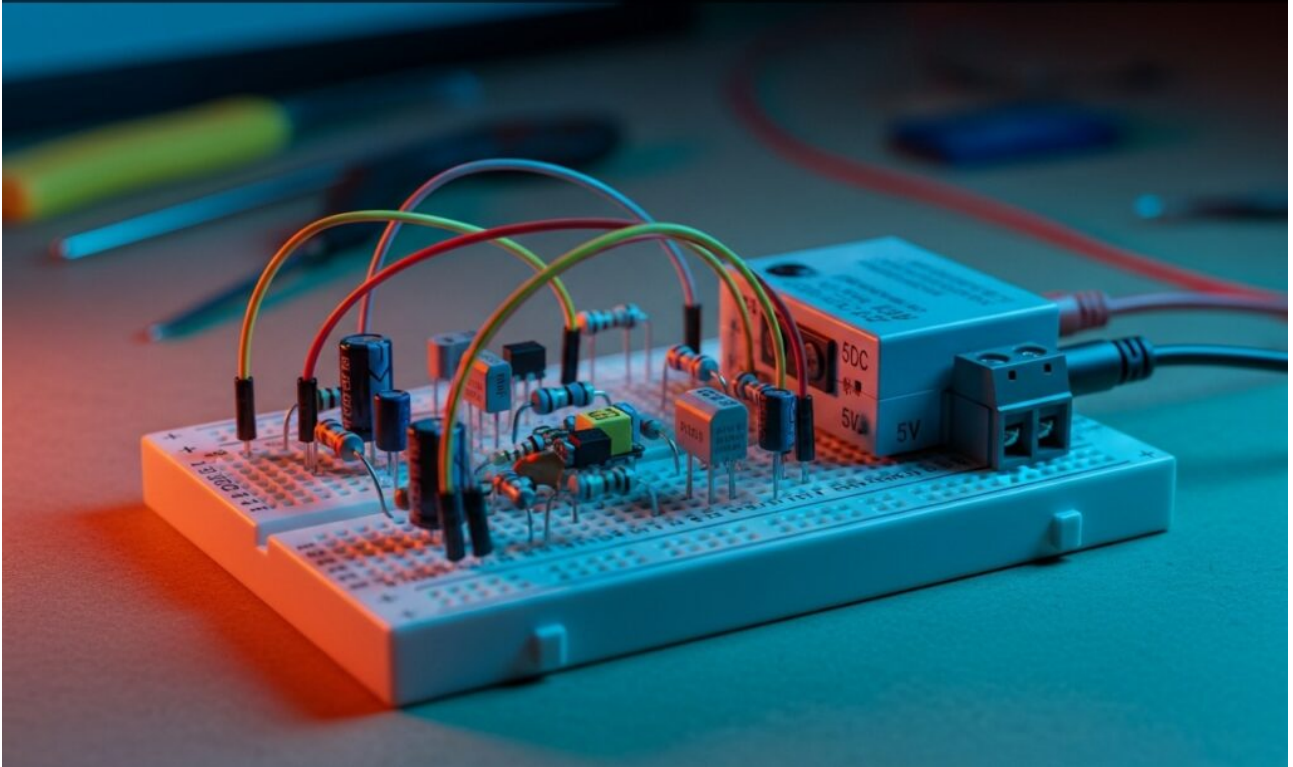
High power circuit isolation



Master Analog Electronics by building a Relay driver circuit. Learn to safely switch high-power loads with low-voltage signals and verify galvanic isolation.

Practical case: DC Motor Reversing

DC Motor Reversing



Master Analog Electronics by building a Relay H-bridge to control DC motor direction. Learn to switch polarity for clockwise spin, reverse motion, and braking.