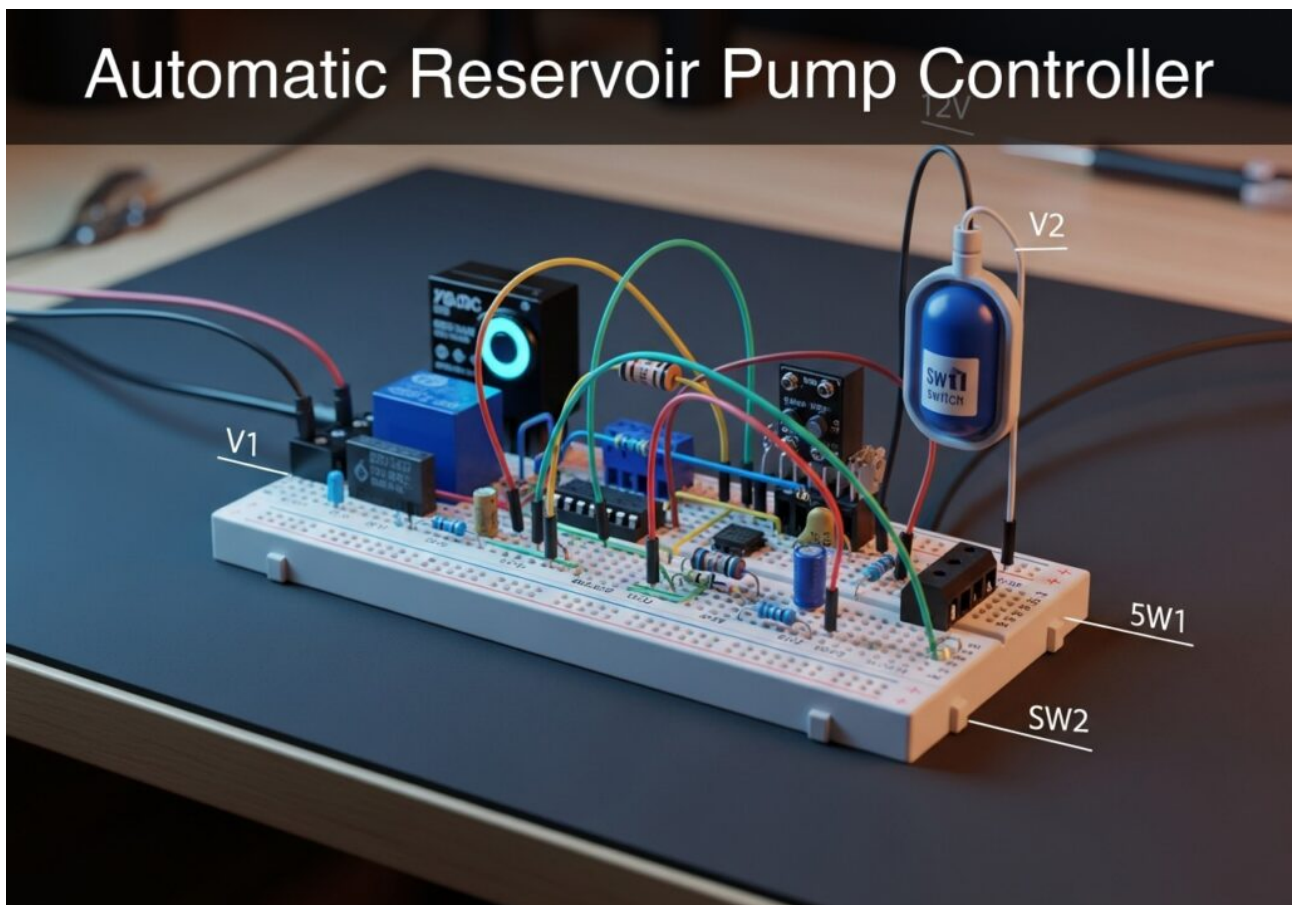


Practical case: Automatic Reservoir Pump Controller



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

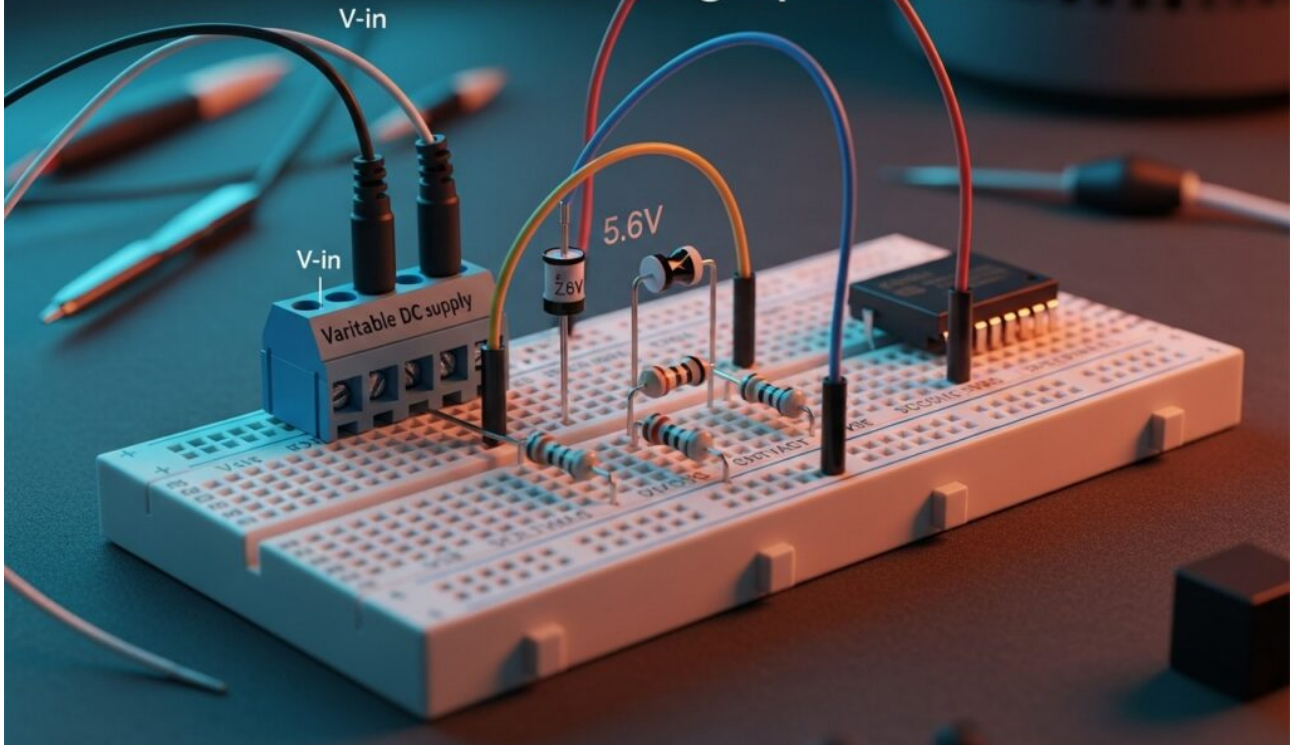
Objective and use case

In this...

Practical case: Overvoltage protection

Overvoltage protection

Overvoltage protection



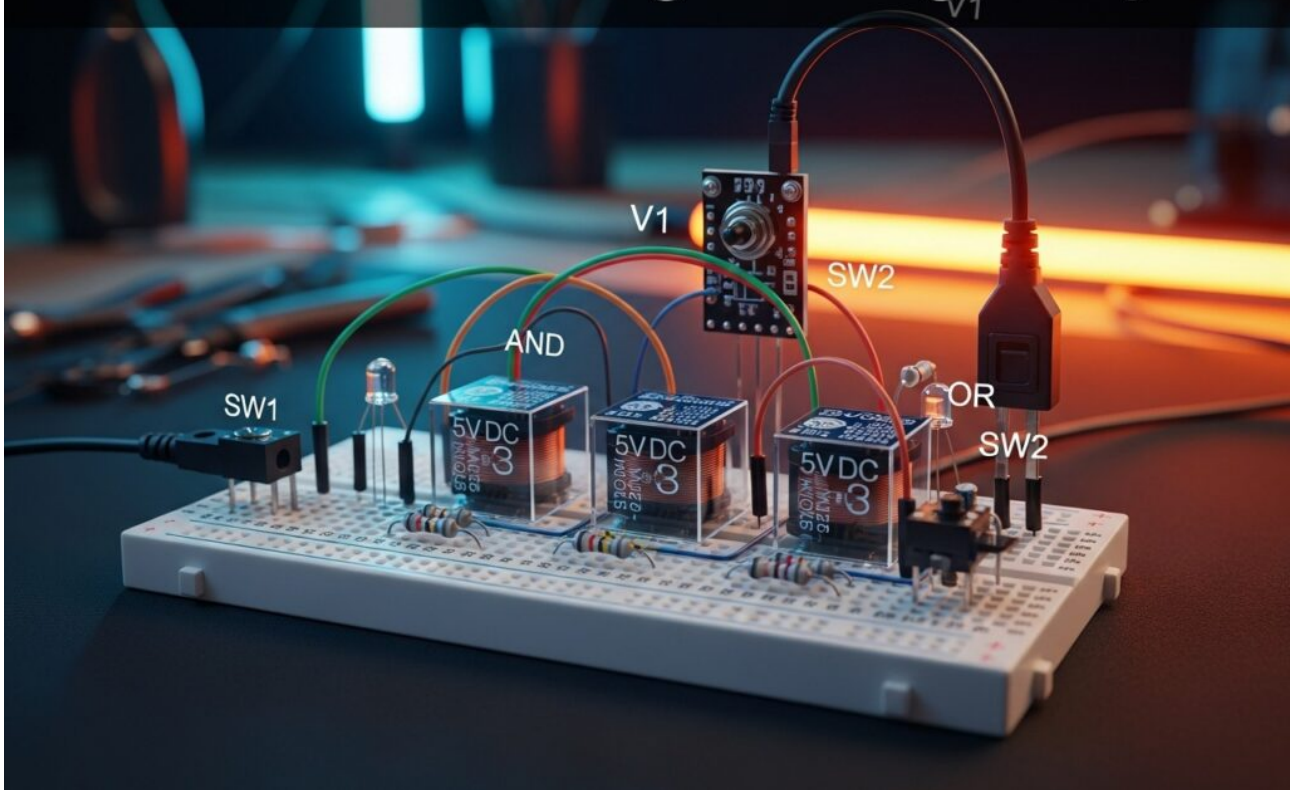
Level: Medium - Disconnect a critical load using a normally closed relay contact when a voltage threshold is exceeded.

Objective and use case

In this...

Practical case: AND and OR logic using relays

AND and OR logic using relays



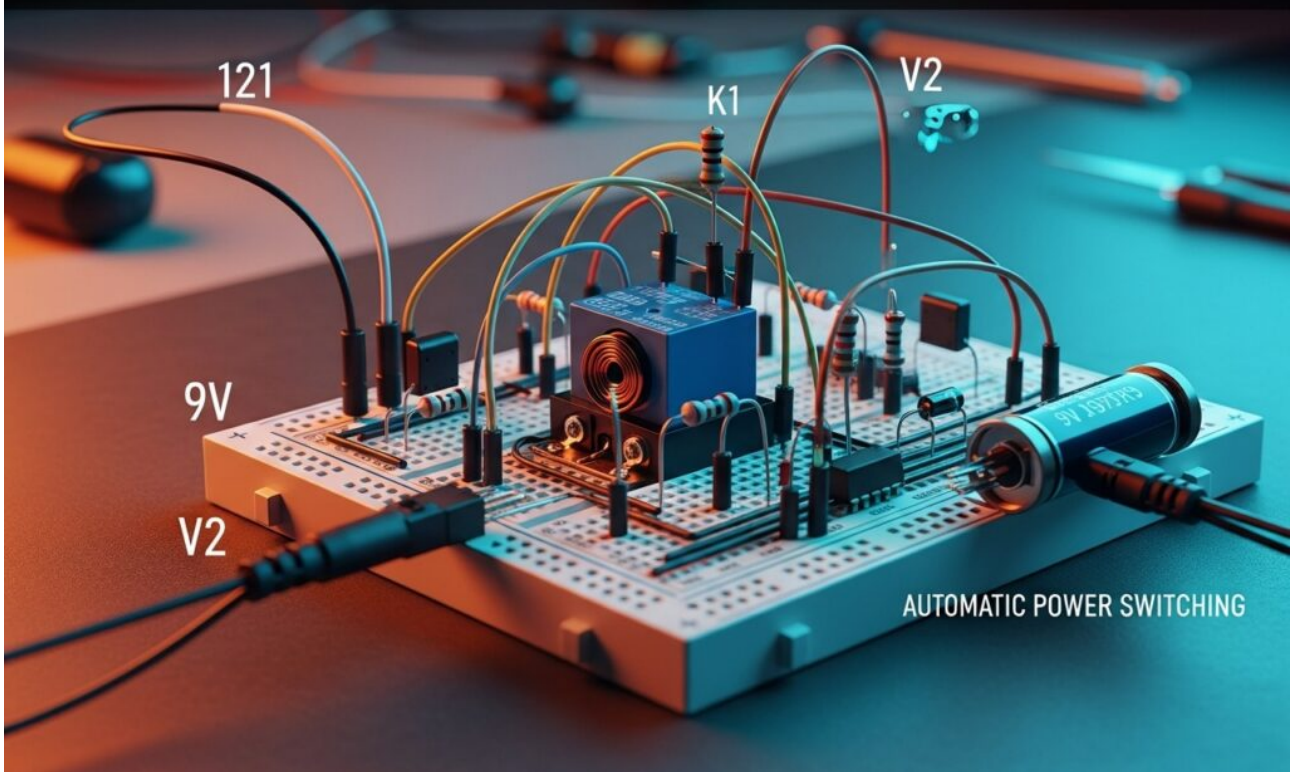
Level: Medium - Build basic logic gates by wiring the contacts of multiple relays in series and parallel.

Objective and use case

* **What you will...

Practical case: Automatic power switching

Automatic power switching

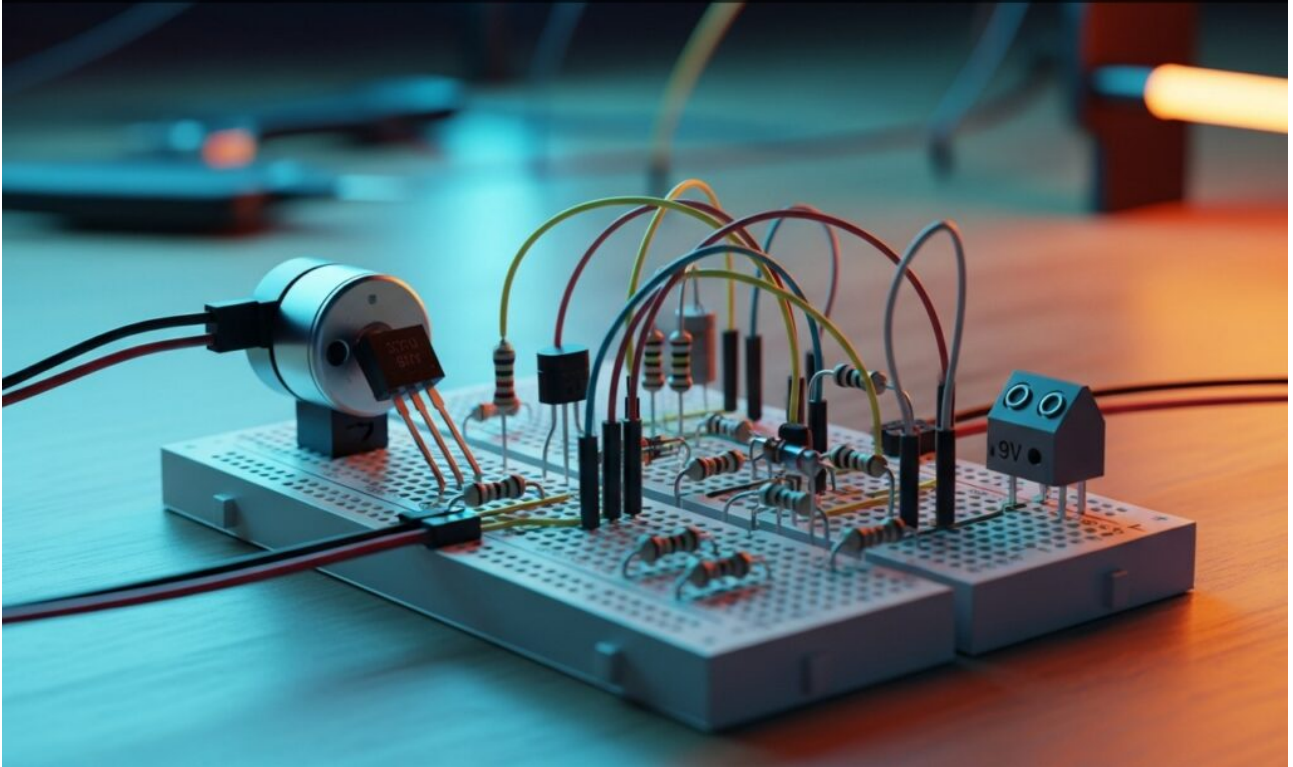


Level: Medium - Implement an SPDT relay to automatically alternate between a main power supply and a backup battery.

Objective and use case
In this...

Practical case: DC motor control with a transistor

DC motor control with a transistor



Level: Basic - Learn to use an NPN transistor as a switch to drive a DC motor, including the use of a flyback diode.

Objective and use case

In this...

Practical case: Noise suppression with RF choke

Level: Medium - Demonstrate the high impedance of the inductor at high frequencies to block noise in power lines.

Objective and use case

You will...