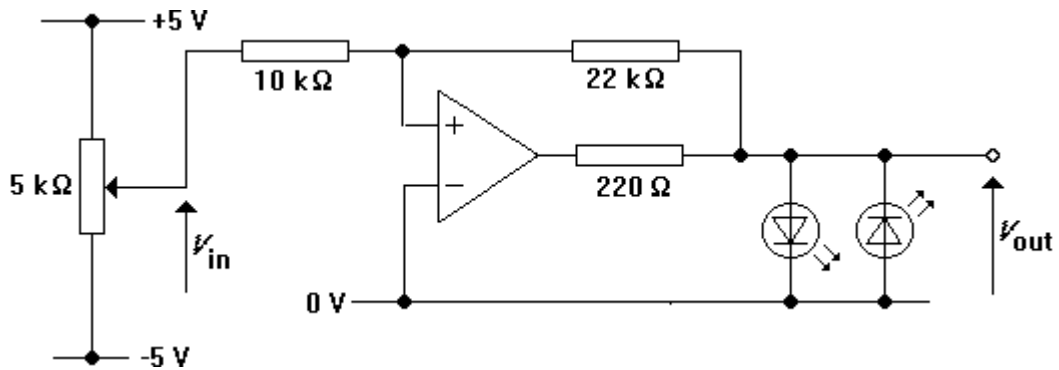


Exploring a Schmitt trigger

1. Assemble the circuit shown below. The LEDs must have the same colour.



2. Use a double-beam oscilloscope to measure V_{out} and V_{in} . Twiddle the potentiometer. If all is well, V_{out} should swap between $+2\text{ V}$ and -2 V .
3. Measure the trip points. Draw a characteristic graph for the circuit.
4. Adapt the circuit so that it becomes an inverting Schmitt trigger with trip points at approximately $\pm 1\text{ V}$. Check that it operates correctly.