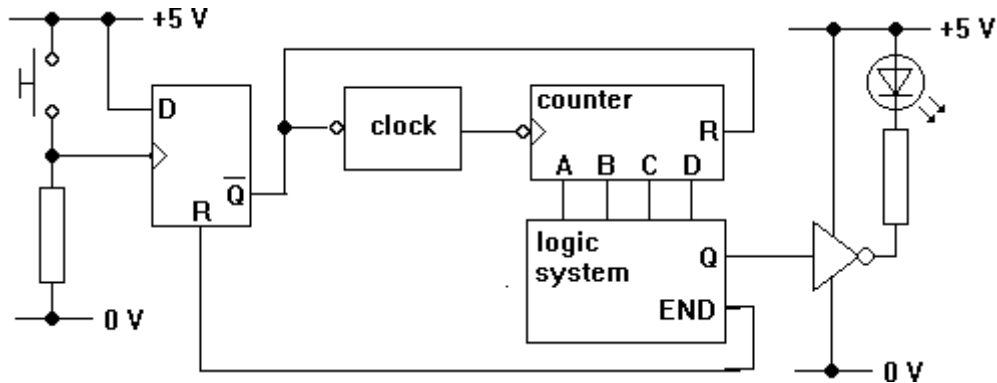
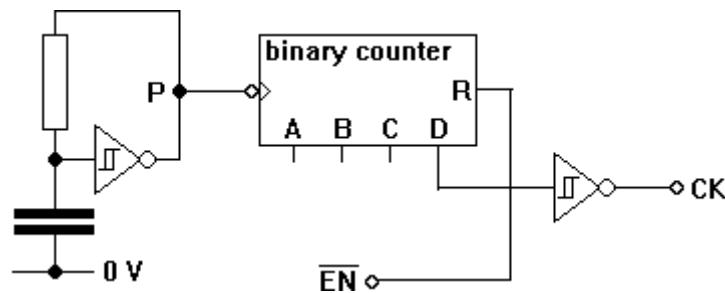


One-shot sequencers

1. Design a one-shot sequencer with the following behaviour. Each time the switch is pressed, the LED glows for 1 s, goes off for 2 s, glows for 3 s and then stops glowing. Use a 4051 eight-input multiplexer to build the logic system.



2. Assemble the synchronous clock circuit shown below. Chose component values for the relaxation oscillator such that CK has a frequency of 1 Hz when EN-bar goes low. Check that it produces pulses at 1 s intervals when it is enabled.



3. Add the flip-flop and switch. Check that pressing the switch sets the clock going.
4. Assemble the rest of the circuit. Test it out.