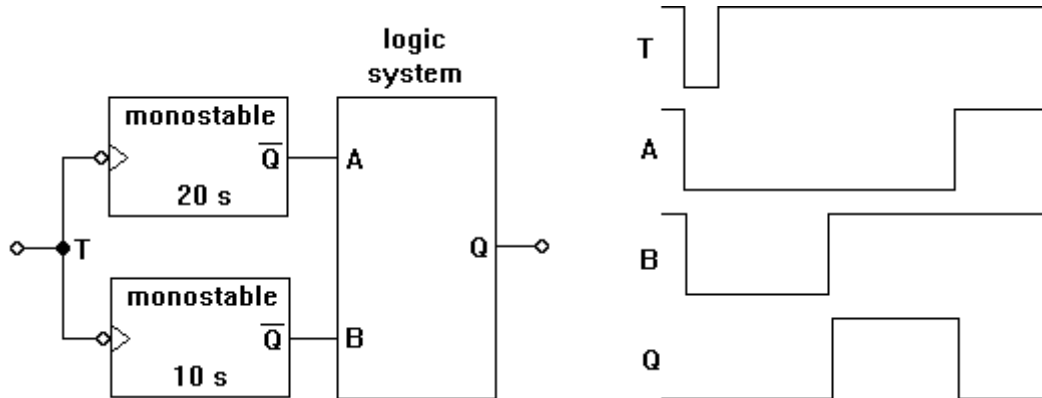
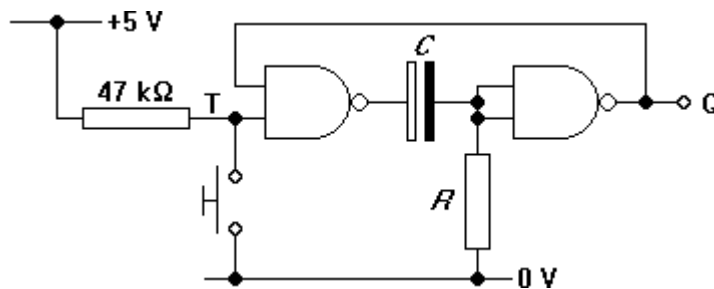


Delayed pulse monostable

It is often useful to be able to produce a short pulse at a fixed time **after** a system has been triggered. You are going to find one way in which it can be done. The block diagram and timing diagram is shown below.



1. Assemble a monostable whose output decreases for 10 s each time that its input decreases. Use the circuit shown below: $T = 0.7RC$ with $R > 10 \text{ k}\Omega$.



2. Assemble another monostable which has a pulse length of 20 s. Trigger it from the same switch as the other monostable.
3. Design a suitable logic system using NAND gates. Assemble it and test that it has the correct behaviour **before** connecting it to the outputs of the monostables.
4. Test the whole system. The LED should come on ten seconds after the switch has been pressed, and remain glowing for the next ten seconds.