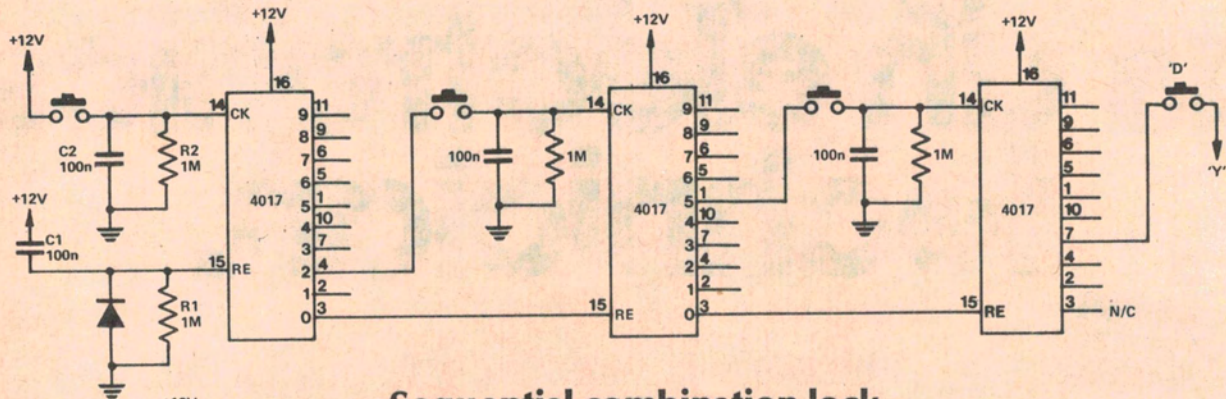


# Ideas for Experimenters

These pages are intended primarily as a source of ideas. As far as reasonably possible all material has been checked for feasibility, component availability etc, but the circuits have not necessarily been built and tested in our laboratory. Because of the nature of the information in this section we cannot enter into any correspondence about any of the circuits, nor can we produce constructional details.



## Sequential combination lock

Another combination lock, this one from **Ronald Mellor of Peakhurst, NSW**. To operate the lock, the buttons must be pressed the right number of times and in the right order. If the 'D' button is pressed ahead of time the alarm sounds.

Here, the combination is 2, 5, 3, 1. The odds against pressing the right number first up are 17 496 to 1, not good odds for a potential thief!

Three 4017 decade dividers are used

to count the combination which can be easily changed by simply changing the output pin of each divider. The network R1 and C1 ensures all counters reset at switch-on, while R2 and C2 are for debouncing.

The output transistors both remain conducting in the quiescent state. A '0' or '1' signal on the 'Y' line will turn Q1 or Q2 off respectively, giving either an unlock or alarm signal.

