

## 5 Set up a lighting sequence.

1. Build the Flowcode program.
2. Connect the LED Unit to PORT B, and create three LEDs, one connected to Port B0, one to B1 and one to B2.
3. Configure the Loop icon as in previous programs, and set up the other components as follows:  
(All three Delay icons are set up in the same way)

Display name	Switch all LEDs off
Value	0
Port	PORT B
Output to	Entire Port

Display name	Delay
Delay value	1 second

Display name	Switch 1st LED on
Value	1
Port	PORT B
Output to	Single Bit 0

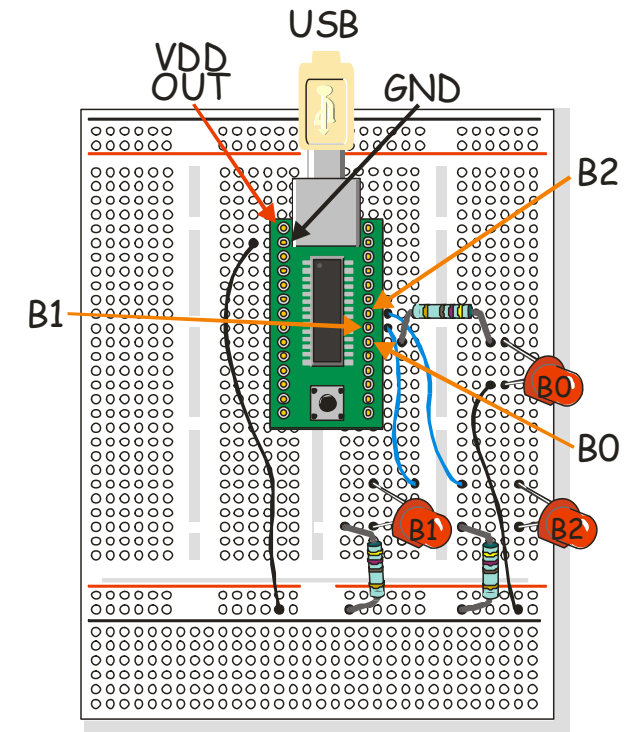
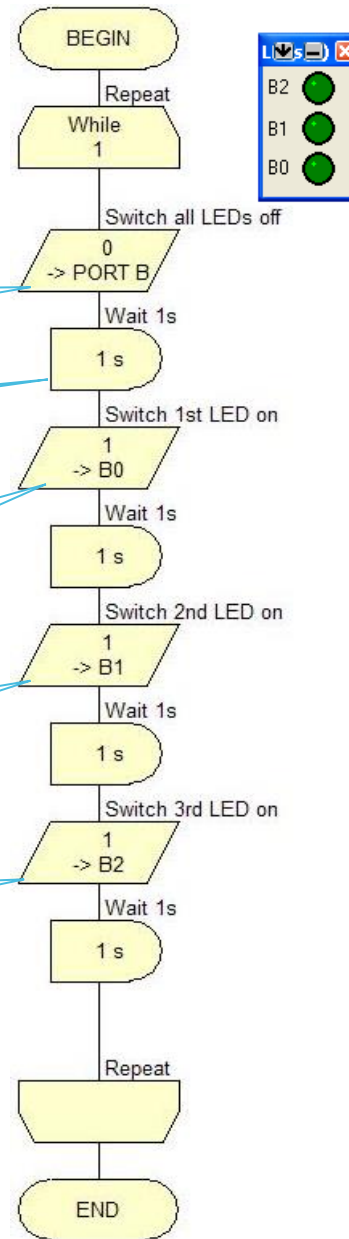
Display name	Switch 2nd LED on
Value	1
Port	PORT B
Output to	Single Bit 1

Display name	Switch 3rd LED on
Value	1
Port	PORT B
Output to	Single Bit 2

4. Save the Flowcode program, and then compile it to the chip.
5. Build the circuit, shown opposite, on the prototype board.
6. Test the circuit by observing the sequence of lights.

Further work:

Modify the program so that a switch must be pressed to make the sequence start.



Circuit notes:

- Make sure that the LEDs are plugged in the right way round!
- Each LED is protected by a 470Ω resistor.