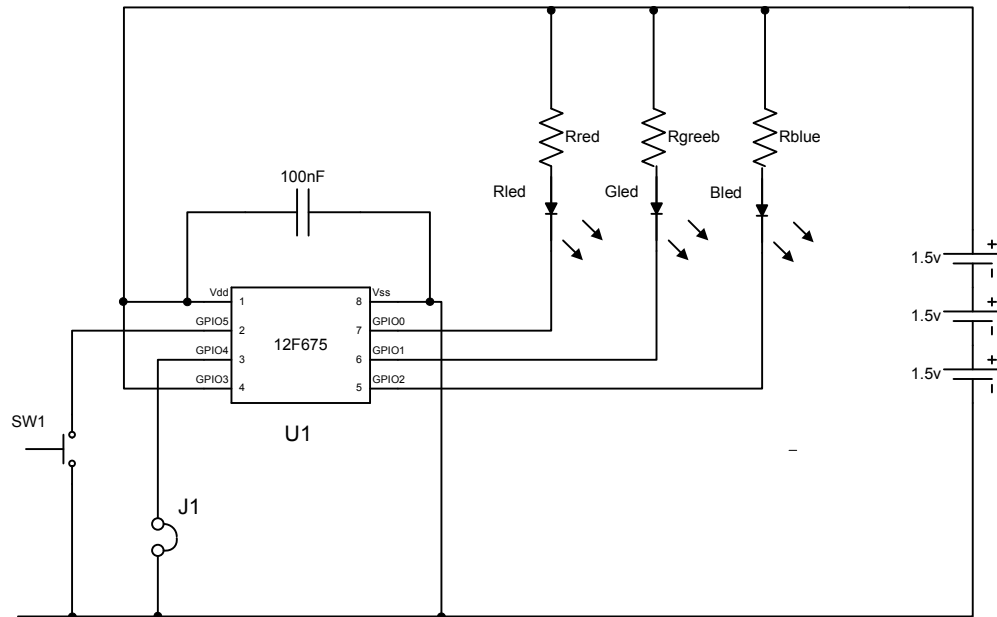# Battery operated RGB LED Light

This version of the RGB light uses the same firmware as the version above. Grounding GPIO4 (J1 closed)tells the software to invert the output drives so that they become active low. In this configuration the GPIO pins can sink 25mA each. This circuit should operate from 3 x 1.5v AA batteries

LED1 high brightness red
LED2 high brightness green
LED3 high brightness blue

You may need to play with the LED series resistors to achieve an even intensity between the three colours. Remember that each GPIO pin can sink a maximum of 25mA.

Pressing and holding SW1 will put the PIC to sleep. Pressing and holding SW1 again will wake the PIC. While in sleep mode the circuit only uses a few microAmps so a power switch isn't need.

Rred   Rgreeb   Rblue

Rled   Gled   Bled

100nF

Vdd   Vss
GPIO5   1   8   GPIO0
GPIO4   2   7   GPIO1
GPIO3   3   6   GPIO2
          4   5
      12F675
        U1

SW1

J1

1.5v
1.5v
1.5v