Return to main loop

Interrupt 0 triggered by Pin 2 going low

**Reset to idle state**

Stop timer 1

Turn off lamps

Start counter 0

End of interrupt

Start counter 1

Hold lamps for delay

value

Turn on appropriate lamps depending on random value

**Generate random number**

Set random seed to counter 0

Stop counter 0

Generate pseudo random number

Do random number modulo 5 to get number in range

Iterate counter by one

**Program Power up**

Setup IO registers and delay time

Start counter 0