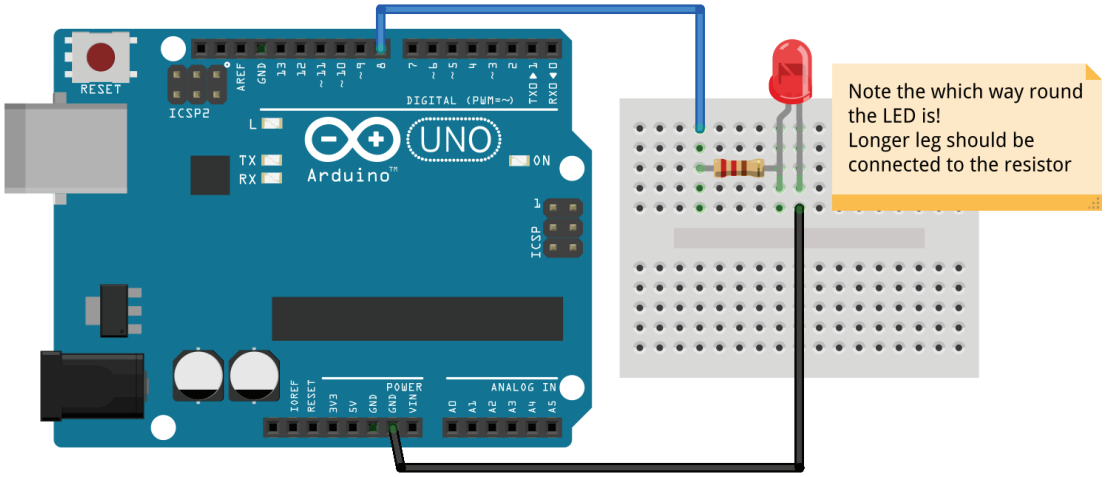
1 LEDs

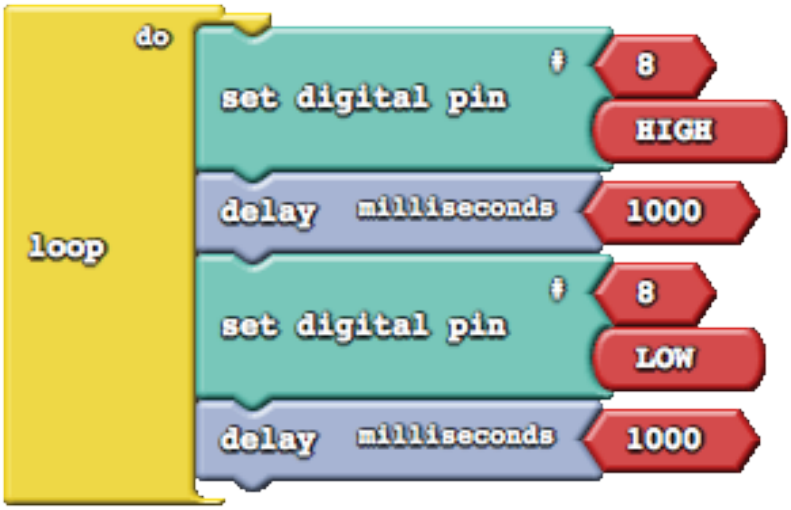
Basic Information

An **LED** (Light Emmiting **Diode**) is a simple, easy to use light source. It is also a **diode** (only allows electric current to go one way through it) so must be plugged in the correct way round.
LEDs require a **resistor** between the power source, and the **LED**. The **resistor** limits the amount of electric current the **LED** can draw at one time. Without it, the **LED** would explode!
The longer leg is always the + side, while the shorter leg is the -

220 ohm resistor



LED



Flashing the LED

After wiring it up as in the above diagram, next step is flashing the **LED** on and off! The **Ardublock** code to the left does just that. In electronics world, we don't normally talk about on and off, more about **high** and **low**. On = **high** Off = **low**. The other key piece of information we must know is which of the 13 digital pins we want to turn on! In the wiring diagram, we attached the **LED** to **pin 8** so we use 8. Once we have the **LED** on, we use **delay** (basically a wait command) and we give it a value in millisec-onds (1000 miliseconds in 1 second), so 1000 means wait 1 second.
We then turn the **LED** off (low) and wait another second
The program then loops back to the start

Now try

1. Make the **LED** stay on for 2 seconds
2. Connect and program the **LED** on pin 10
3. Using pin 10, try experimenting with "set analog pin." What is the difference?