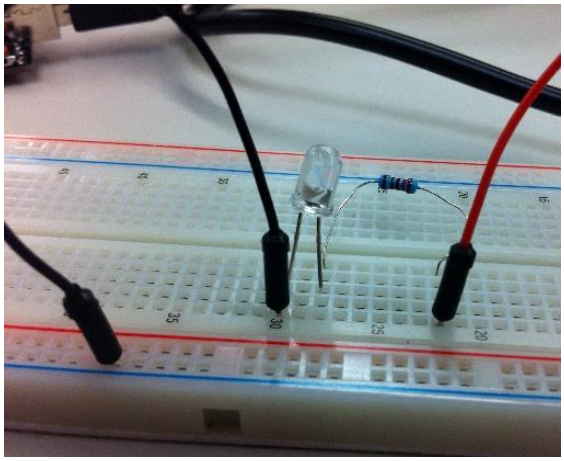
ARDUINO – 1

Setting up the circuit…

Create a circuit from **lose wire** to **resistor** to **LED** to **– power rail**

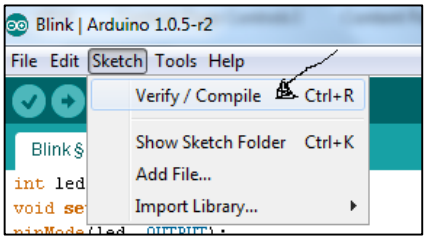


Creating the program…

Open the Arduino software.
Copy the following code, then click **Sketch…Verify/Compile**

```
int led1 = 13;
void setup(){
pinMode(led1, OUTPUT);

void loop() {
digitalWrite(led1, HIGH);
delay(1000);
digitalWrite(led1, LOW);
delay(1000);
}
```



Connecting the computer to the arduino…

Plug the Arduino into the USB port of the computer.

Click Tools… Serial Port and if it is not checked off, click the port so that it is checked
(it will probably read COM 3 or COM 4).
You have just made a connection between the computer and the Arduino.

Connecting the Arduino to the circuit…

Plug the lose wire into port 13 of the Arduino.
Run a wire from **ground port (GND)** on the arduino to the **– power rail** of the breadboard

Uploading the program to the arduino…

Click the red button on the arduino, this tells the arduino that a program is about to be uploaded.
In the software, click **File… Upload…**
The LED should flicker to indicate that the software has begun to be uploaded.
The LED should flicker again to tell you that the software has been uploaded.
The program should then run, with the light blinking on and off every second.

Now change the programming code so that it blinks on and off every 3 seconds. Remember to verify/compile the program, click the arduino's red button, then upload it to the arduino.

Repeat and have the light blink every 0.5 seconds.

Can you wire a second LED, which will be controlled by Port 8 and the LEDs blink at different times? Be careful with the wiring

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