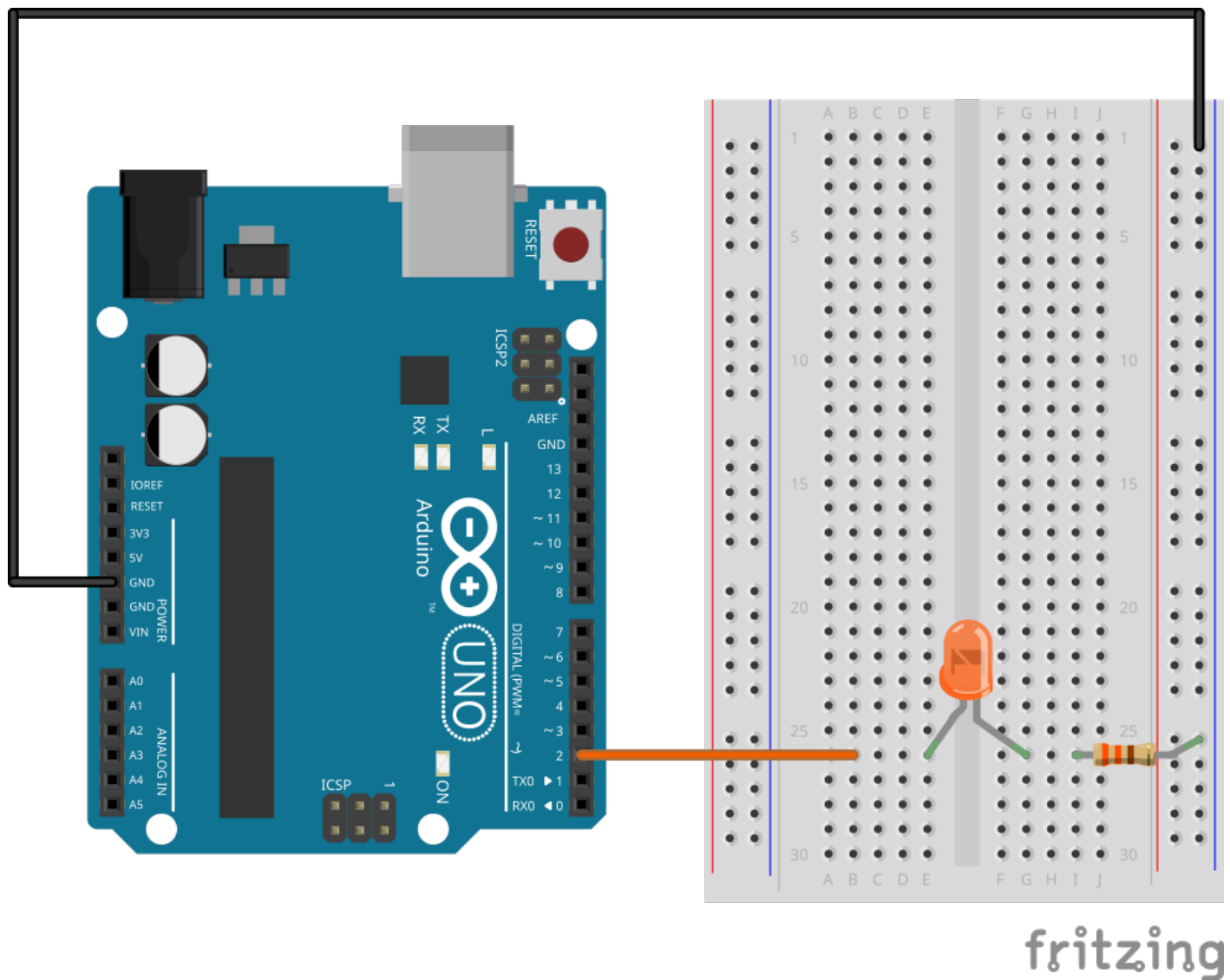


Lab 03 - Using LED's with an Arduino

In this lab, we will be learning how to control simple digital circuits using a microcontroller. The micro we will be using is called an atmega328p, and it is embedded in a development board called an Arduino.



```
int ledPin = 2;

void setup() {
  pinMode(ledPin, OUTPUT);
}
```

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

```
int ledPin2 = 2;  
int ledPin3 = 3;  
int ledPin4 = 4;  
  
void setup() {  
    pinMode(ledPin2, OUTPUT);  
    pinMode(ledPin3, OUTPUT);  
    pinMode(ledPin4, OUTPUT);  
}
```

```
void loop() {  
    digitalWrite(ledPin2, HIGH);  
    digitalWrite(ledPin3, HIGH);  
    digitalWrite(ledPin4, HIGH);  
    delay(1000);  
    digitalWrite(ledPin2, LOW);  
    digitalWrite(ledPin3, LOW);  
    digitalWrite(ledPin4, LOW);  
    delay(1000);  
}
```

```
int ledPin2 = 2;  
int ledPin3 = 3;  
int ledPin4 = 4;  
  
void setup() {  
    pinMode(ledPin2, OUTPUT);  
    pinMode(ledPin3, OUTPUT);
```

```
pinMode(ledPin4, OUTPUT);  
}  
  
void loop() {  
  digitalWrite(ledPin2, HIGH);  
  digitalWrite(ledPin3, LOW);  
  digitalWrite(ledPin4, LOW);  
  delay(1000);  
  
  digitalWrite(ledPin2, LOW);  
  digitalWrite(ledPin3, HIGH);  
  digitalWrite(ledPin4, LOW);  
  delay(1000);  
  
  digitalWrite(ledPin2, LOW);  
  digitalWrite(ledPin3, LOW);  
  digitalWrite(ledPin4, HIGH);  
  delay(1000);  
}
```

Revision #3

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