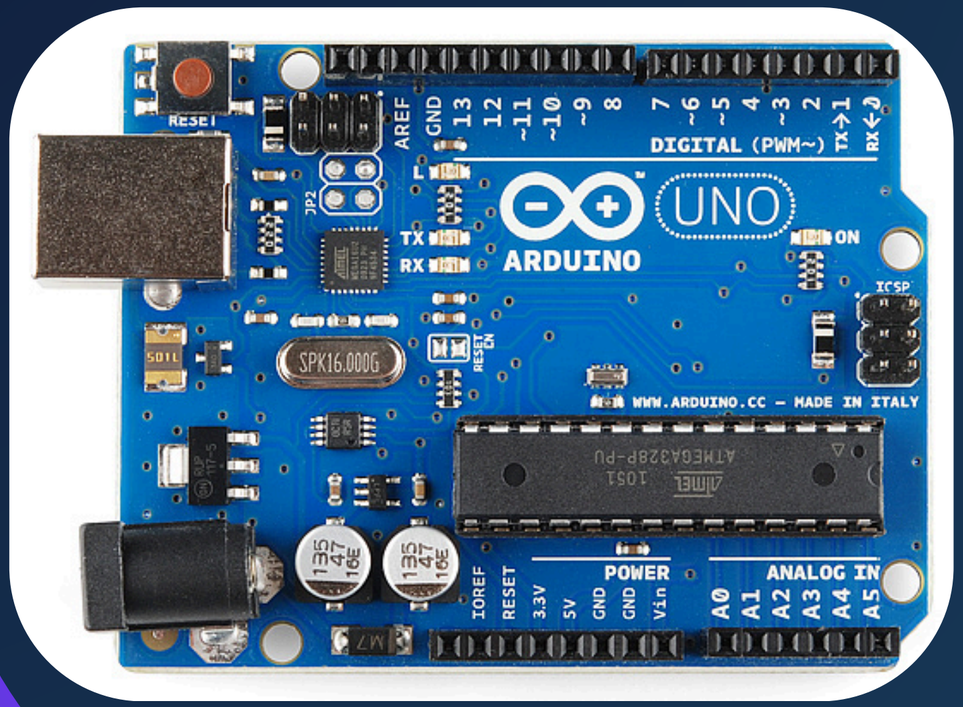
Arduino Experiment 1: Blinking LED



Rose Barakat

WHAT IS TINKER CAD?

A simulation tool to build and test circuits online.

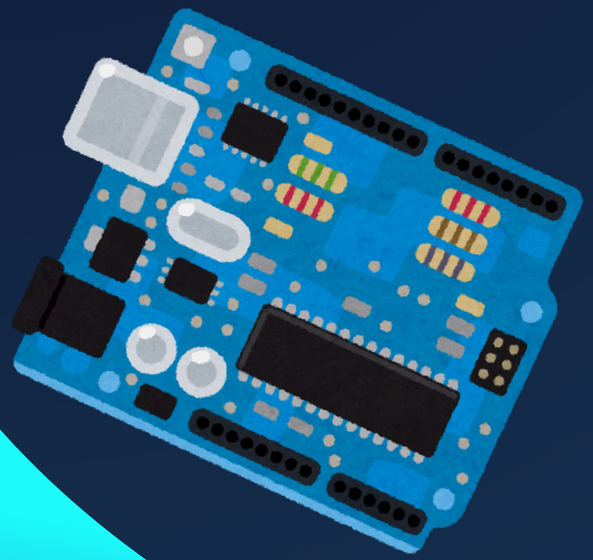
Why Use It?

No need for physical components, easy debugging

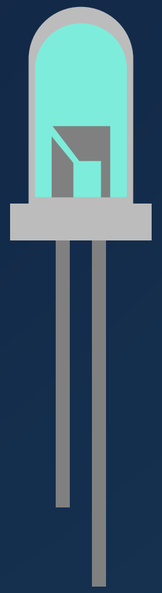
SETTING UP THE CIRCUIT

Components Needed:

1- Arduino

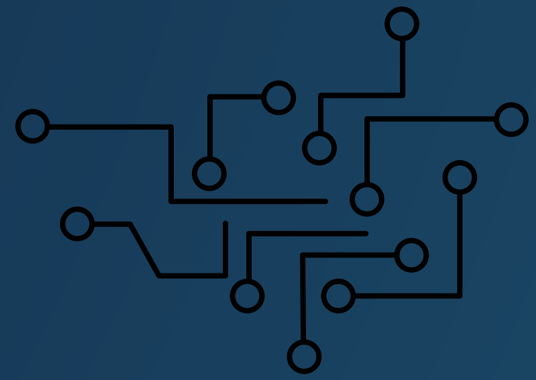


2- LED

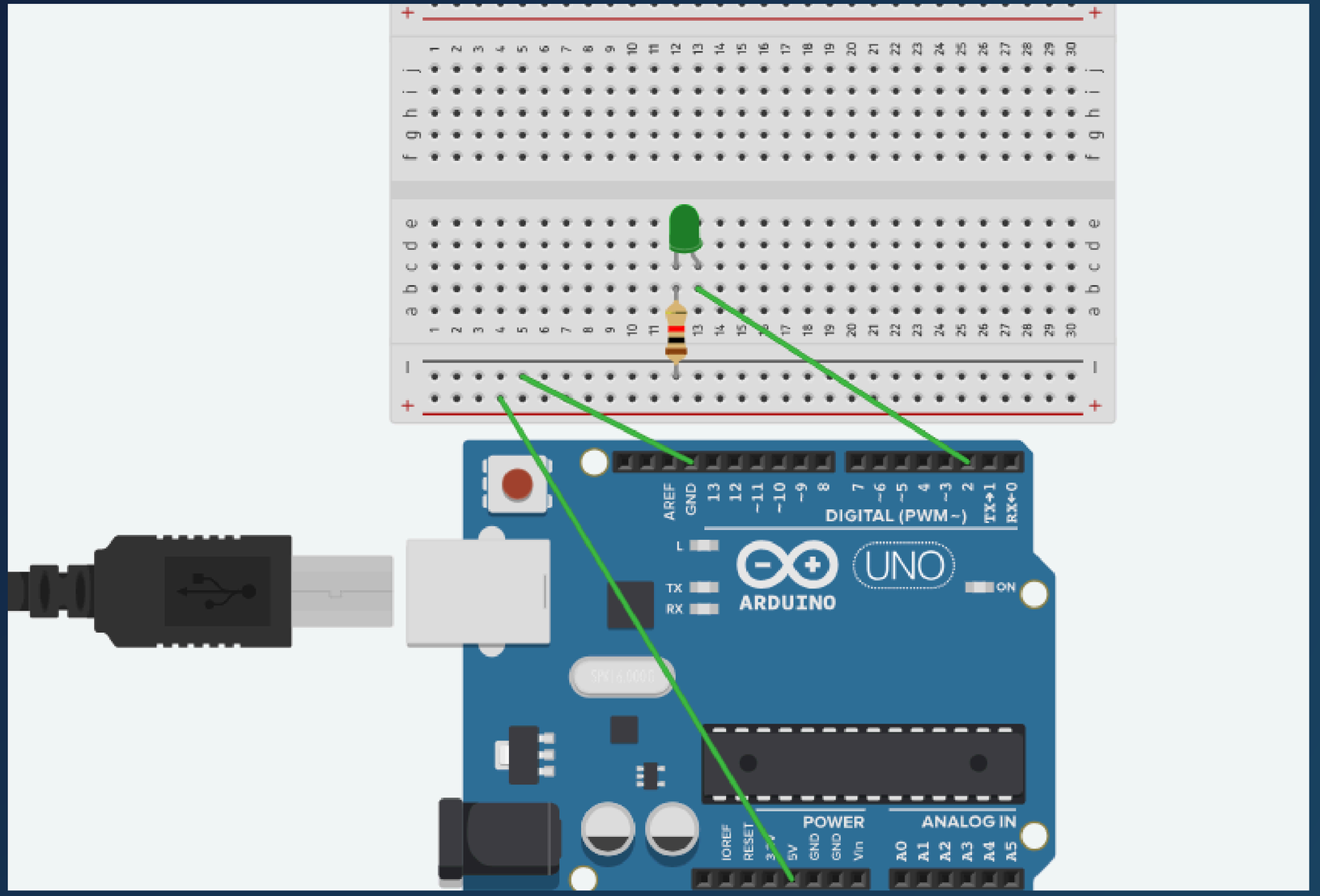


3- Resistor

4- Wires



THE CIRCUIT



CODE PART

```
void setup()
{
  pinMode(2, OUTPUT);
}

void loop()
{
   digitalWrite(2, HIGH);
   delay(1000); // Wait for 1000 millisecond(s)
   digitalWrite(2, LOW);
   delay(1000); // Wait for 1000 millisecond(s)
}
```

Explanation

void setup() {} → Runs once, setting pin modes
void loop() {} → Repeats, controlling the LED
digitalWrite(Pin_Number, HIGH); → Turns LED on
delay(1000); → Waits for 1 second
digitalWrite(Pin_Number, LOW); → Turns LED off
delay(1000); → Waits again

CODING CHALLENGE

Modify the delay time to make the LED blink faster/slower.