

COMP 1045 LAB 1

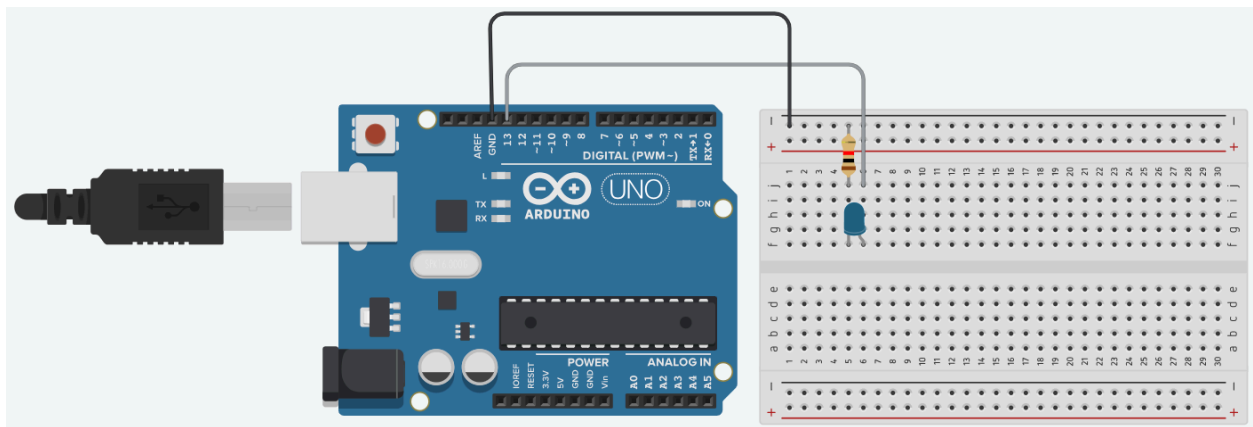
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Level 1: Modify the program to make the LED flash slow three times (1000 mS delay), then quickly three times. (100 mS delay)

Tinkercad URL: <https://www.tinkercad.com/things/ieKJsbMQZ8c-lab1-level1>



```
int blueLED = 13;

void setup() {
  // initialize digital pin LED_BUILTIN as an output.
  pinMode(13, OUTPUT);
}

// the loop function runs over and over again forever
void loop() {
  digitalWrite(13, HIGH); // turn the LED on (HIGH is the voltage level)
  delay(1000);           // wait for a second
  digitalWrite(13, LOW); // turn the LED off by making the voltage LOW
  delay(1000);           // wait for a second
  digitalWrite(13, HIGH);
  delay(1000);
  digitalWrite(13, LOW);
  delay(1000);
  digitalWrite(13, HIGH);
```

```

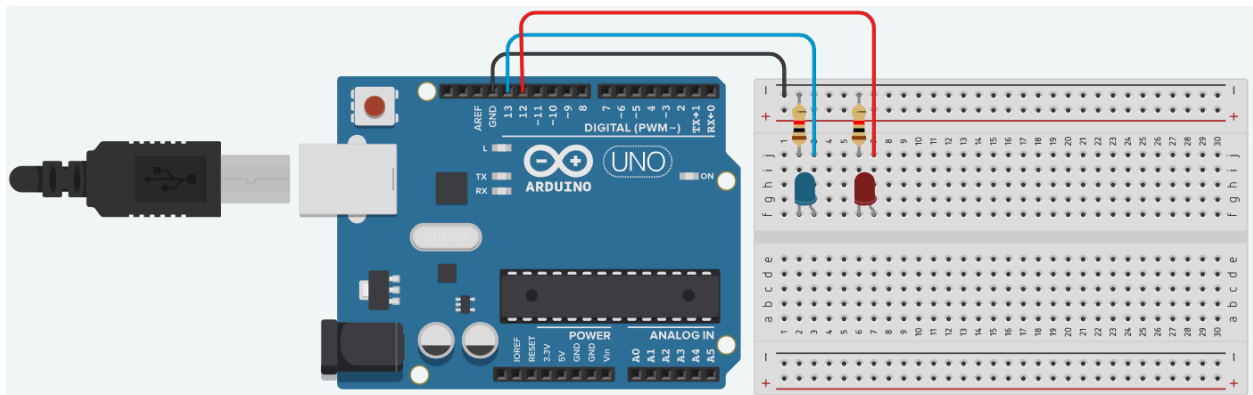
delay(1000);
digitalWrite(13, LOW);
delay(1000);

digitalWrite(13, HIGH); // turn the LED on (HIGH is the voltage level)
delay(100);             // wait for a 100 mS delay
digitalWrite(13, LOW);  // turn the LED off by making the voltage LOW
delay(100);             // wait for a 100 mS delay
digitalWrite(13, HIGH);
delay(100);
digitalWrite(13, LOW);
delay(100);
digitalWrite(13, HIGH);
delay(100);
digitalWrite(13, LOW);
delay(100);
}

```

Level 2: Write a program that alternates between the blue LED1 and red LED2, to simulate an emergency vehicle.

Tinkercad URL: <https://www.tinkercad.com/things/gqrMB5I3z98-lab1-level2>



```

int Blue_LED = 13;
int Red_LED = 12;

void setup() {
  // initialize digital pin LED_BUILTIN as an output.
  pinMode(13, OUTPUT);
  pinMode(12, OUTPUT);
}

```

```
// the loop function runs over and over again forever
void loop() {
  digitalWrite(13, HIGH);
  delay(250);
  digitalWrite(13, LOW);
  delay(250);
  digitalWrite(12, HIGH);
  delay(250);
  digitalWrite(12, LOW);
  delay(250);
}
```