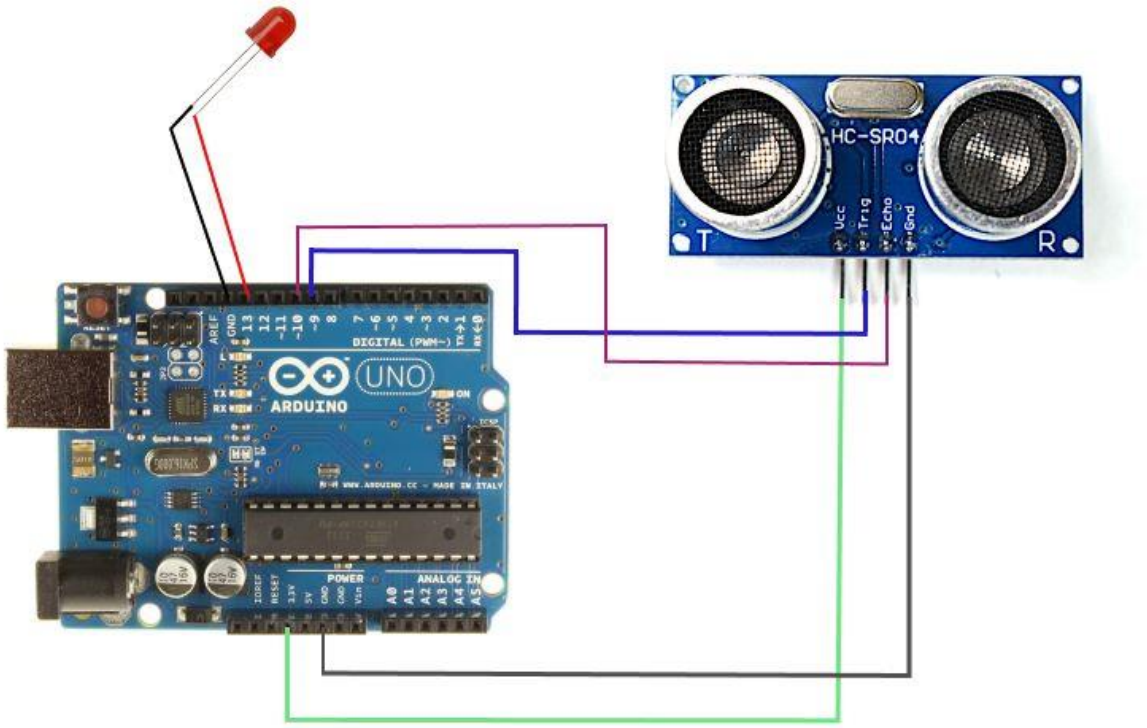
Circuit:



Code:

```
// Define pins
const int trigPin = 9;
const int echoPin = 10;
const int ledPin = 13;

// Define variables
long duration;
int distance;
int blinkInterval;

void setup() {
  // Initialize pins
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
  pinMode(ledPin, OUTPUT);

  // Serial communication for debugging
  Serial.begin(9600);
}
```

```
void loop() {
  // Send a pulse to the ultrasonic sensor
  digitalWrite(trigPin, LOW);
  delayMicroseconds(2);
  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW);

  // Measure the duration of the pulse
  duration = pulseIn(echoPin, HIGH);

  // Calculate distance in centimeters
  distance = duration / 58;

  // Set blink interval based on distance
  if (distance < 10) {
    blinkInterval = 100;
  } else if (distance < 20) {
    blinkInterval = 200;
  } else if (distance < 30) {
    blinkInterval = 300;
  } else {
    blinkInterval = 500;
  }

  // Blink the LED at the appropriate interval
  digitalWrite(ledPin, HIGH);
  delay(blinkInterval);
  digitalWrite(ledPin, LOW);
  delay(blinkInterval);

  // Print distance for debugging
  Serial.print("Distance: ");
  Serial.print(distance);
  Serial.println(" cm");
}
```

About:

In this project if an object is present in front of the ultrasound sensor the led light will start blinking if the object come towards they sensor the led will blink with less delay