

no diagram.json Library Manager

```
#define ECHO_PIN 2
#define TRIG_PIN 3
```

```
void setup() {
  Serial.begin(115200);
  pinMode(LED_BUILTIN, OUTPUT);
  pinMode(TRIG_PIN, OUTPUT);
  pinMode(ECHO_PIN, INPUT);
}

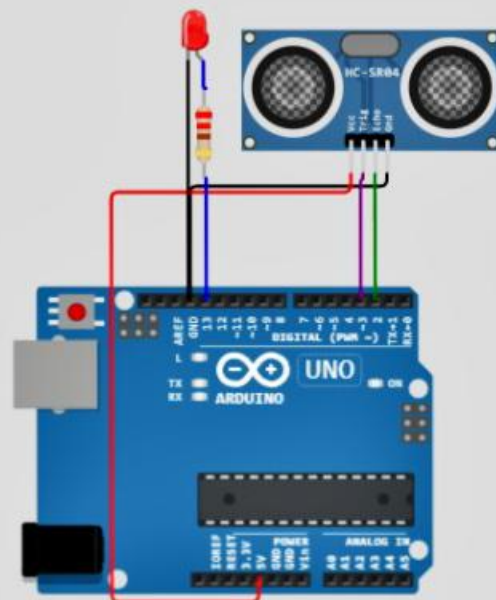
float readDistanceCM() {
  digitalWrite(TRIG_PIN, LOW);
  delayMicroseconds(2);
  digitalWrite(TRIG_PIN, HIGH);
  delayMicroseconds(10);
  digitalWrite(TRIG_PIN, LOW);
  int duration = pulseIn(ECHO_PIN, HIGH);
  return duration * 0.034 / 2;
}
```

```
void loop() {
  float distance = readDistanceCM();

  bool isNearby = distance < 100;
  digitalWrite(LED_BUILTIN, isNearby);

  Serial.print("Measured distance: ");
  Serial.println(readDistanceCM());
}
```

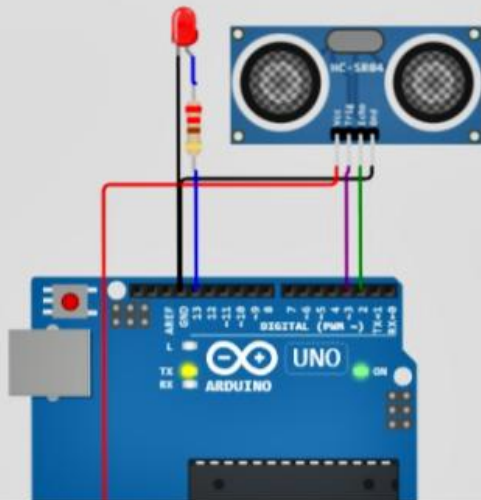
Simulation



## Simulation



00:02.499 59%



Measured distance: 177.26

Measured distance: 177.24

Measured distance: 177.16

Measured distance: 177.24

Measured distance: 177.16

Measured distance: 177.24

Measured distance: 177.16