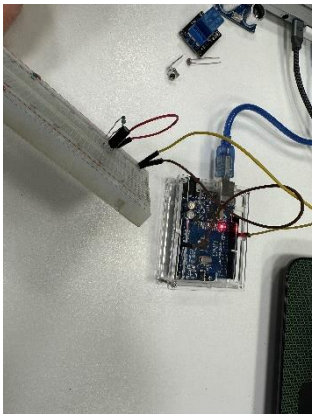
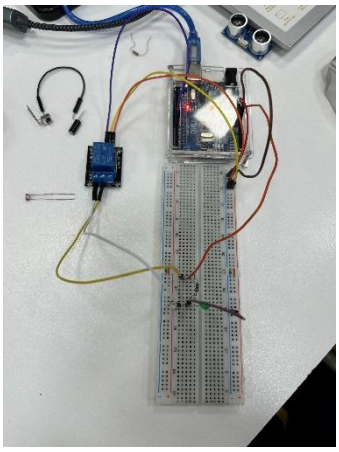
Capteur de contact

```ino
int inPin = 12;
int value = 0;

void setup() {
  pinMode(LED_BUILTIN, OUTPUT);
  pinMode(LED_BUILTIN, INPUT);
}

void loop() {
  value = digitalRead(inPin);
  digitalWrite(LED_BUILTIN, value);
}
```



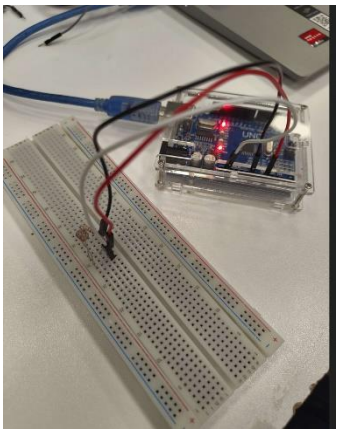
Contact via relais

```ino
int relay = 7;

void setup() {
  pinMode(relay, OUTPUT);
}

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

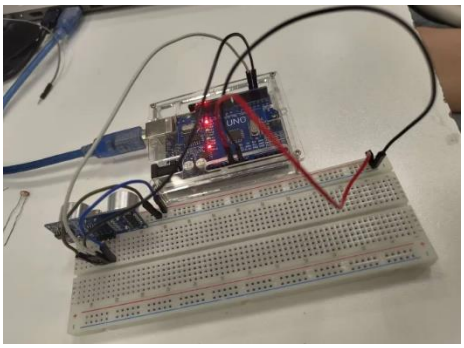


Capteur de luminosité

```ino
int PHOTOSENSOR = A0;

void setup() {
  Serial.begin(9600);
  pinMode(PHOTOSENSOR, INPUT);
}

void loop() {
  int analogValue = analogRead(PHOTOSENSOR);

  Serial.print("Analog reading: ");
  Serial.print(analogValue);

  delay(500);
}
```

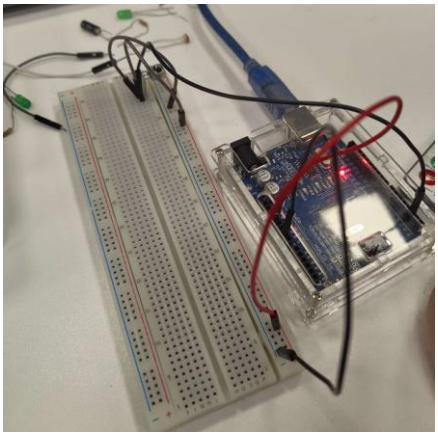


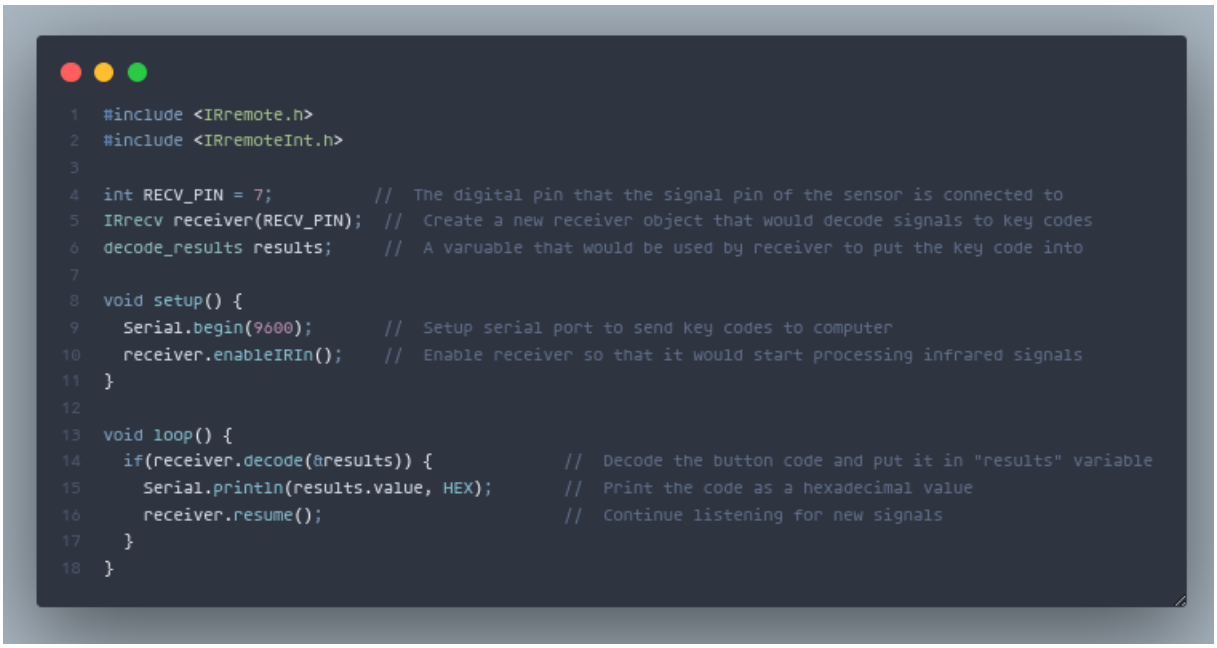
Capteur de distance



```arduino
int trigPin = 11;
int echoPin = 10;

float duration_us, distance_cm;

void setup() {
  Serial.begin (9600);
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
}

void loop() {
  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW);

  duration_us = pulseIn(echoPin, HIGH);

  distance_cm = 0.017 * duration_us;

  Serial.print("distance: ");
  Serial.print(distance_cm);
  Serial.println(" cm");

  delay(500);
}
```

Capteur infrarouge





```ino
#include <IRremote.h>
#include <IRremoteInt.h>

int RECV_PIN = 7;          //  The digital pin that the signal pin of the sensor is connected to
IRrecv receiver(RECV_PIN);  //  Create a new receiver object that would decode signals to key codes
decode_results results;     //  A varuable that would be used by receiver to put the key code into

void setup() {
  Serial.begin(9600);       //  Setup serial port to send key codes to computer
  receiver.enableIRIn();    //  Enable receiver so that it would start processing infrared signals
}

void loop() {
  if(receiver.decode(&results)) {             //  Decode the button code and put it in "results" variable
    Serial.println(results.value, HEX);       //  Print the code as a hexadecimal value
    receiver.resume();                        //  Continue listening for new signals
  }
}
```