Project Overview

components

Name	Quantity	Component
U1	1	Arduino Uno R3
Sreed switch	1	Slideswitch
D1	1	Blue LED
TNPN	1	NPN Transistor (BJT)
R220 Rbuzzer	2	220 Ω Resistor
R10	1	10 kΩ Resistor
PIEZObuzzer	1	Piezo

The design of **Opto-Isolator (OPTO) and Reed Switch**
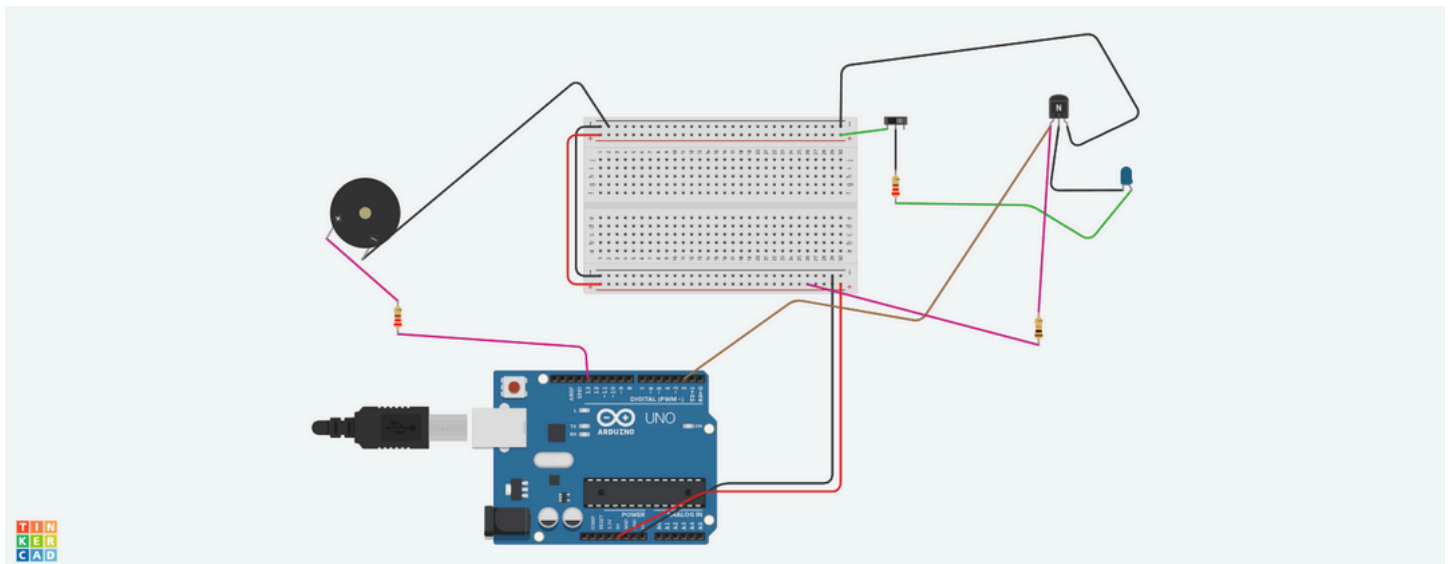
THE CODE
OPTO-ISOLATOR (OPTO) & REED SWITCH

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arduino

```arduino
const int sensorPin = 2;      // Input from opto-isolator output
const int alarmPin = 13;      // Output to LED or buzzer

void setup() {
  pinMode(sensorPin, INPUT);
  pinMode(alarmPin, OUTPUT);
  digitalWrite(alarmPin, LOW);
}

void loop() {
  int sensorState = digitalRead(sensorPin);

  if (sensorState == LOW) {
    // Intrusion detected
    digitalWrite(alarmPin, HIGH);
  } else {
    digitalWrite(alarmPin, LOW);
  }
}
```

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Thank You

FOR YOUR WATCH

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