



## Sizzling Fulffy-Gogo

Saved



Code

Start Simulation

Send To

Components  
Basic

Search



Resistor



LED



Pushbutton



Potentiometer



Capacitor



Slideswitch



9V Battery



Coin Cell 3V  
Battery



1.5V Battery



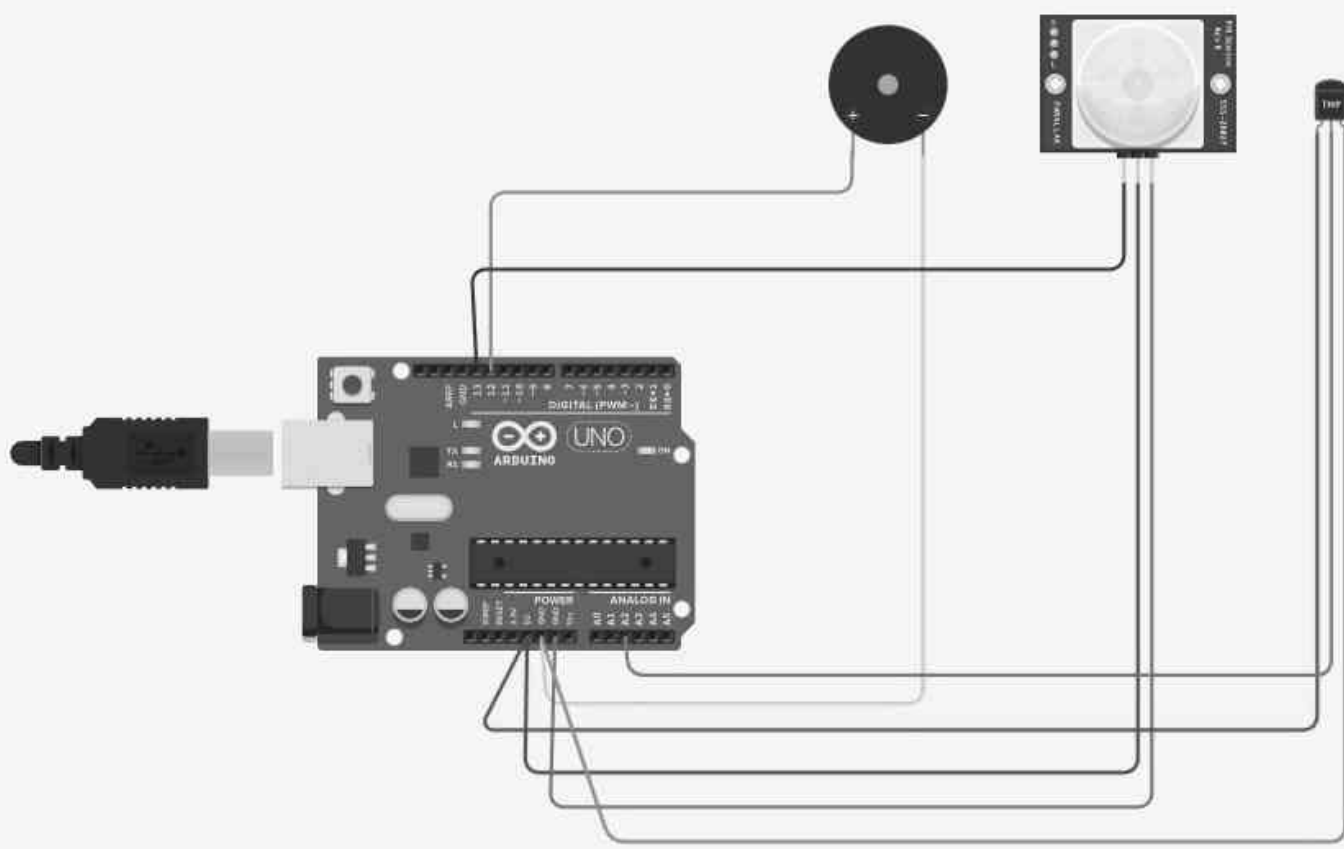
Breadboard  
Small



micro:bit



Arduino Uno  
R3





Code



Start Simulation

Send To

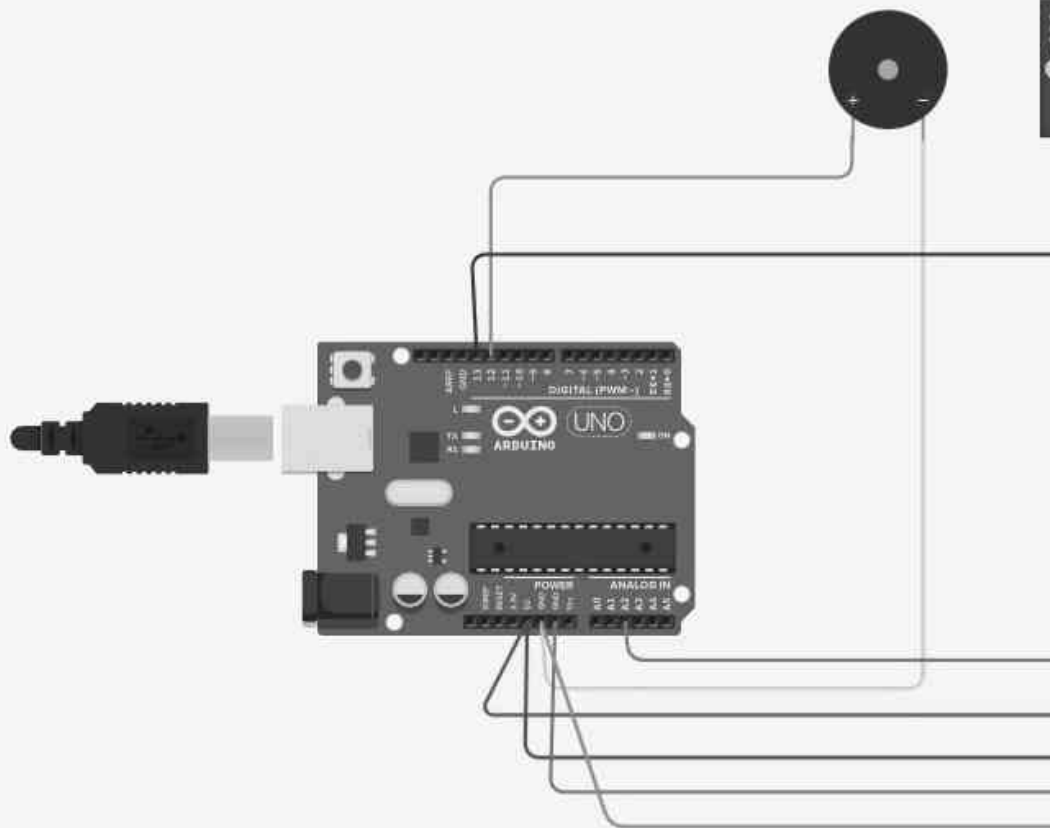


Text



A

1 (Arduino Uno R3)



```
1 #define sensorPin A3
2 int Buzz=8;//Define Buzzer pin
3 int LED=13;//Define LED pin
4 int FIR=4;//Define FIR pin
5 int val=0;//Initializing the value as zero at the beginning
6
7 void setup(){
8   pinMode(sensorPin,INPUT);
9   pinMode(Buzz,OUTPUT);
10  pinMode(LED,OUTPUT);
11  Serial.begin(9600);
12 }
13
14 void loop(){
15   //Get a reading from the temperature sensor:
16   int reading=analogRead(sensorPin);
17
18   //convert the reading into voltage:
19   float voltage=reading*(5000 / 1024.0);
20
21   //Convert the voltage into the temperature in Celsius:
22   float temperature=(voltage-500)/10;
23
24   //Print the temperature in the Serial Monitor:
25   Serial.print(temperature);
26   Serial.print("\xC2\xB0");//shows degree symbol
27   Serial.println("C");
28
29   delay(1000);//wait a second between readings
30   if(temperature>40)
31   {
32     digitalWrite(LED,HIGH);//Turn LED ON
33   }
```



Serial Monitor





Code

Start Simulation

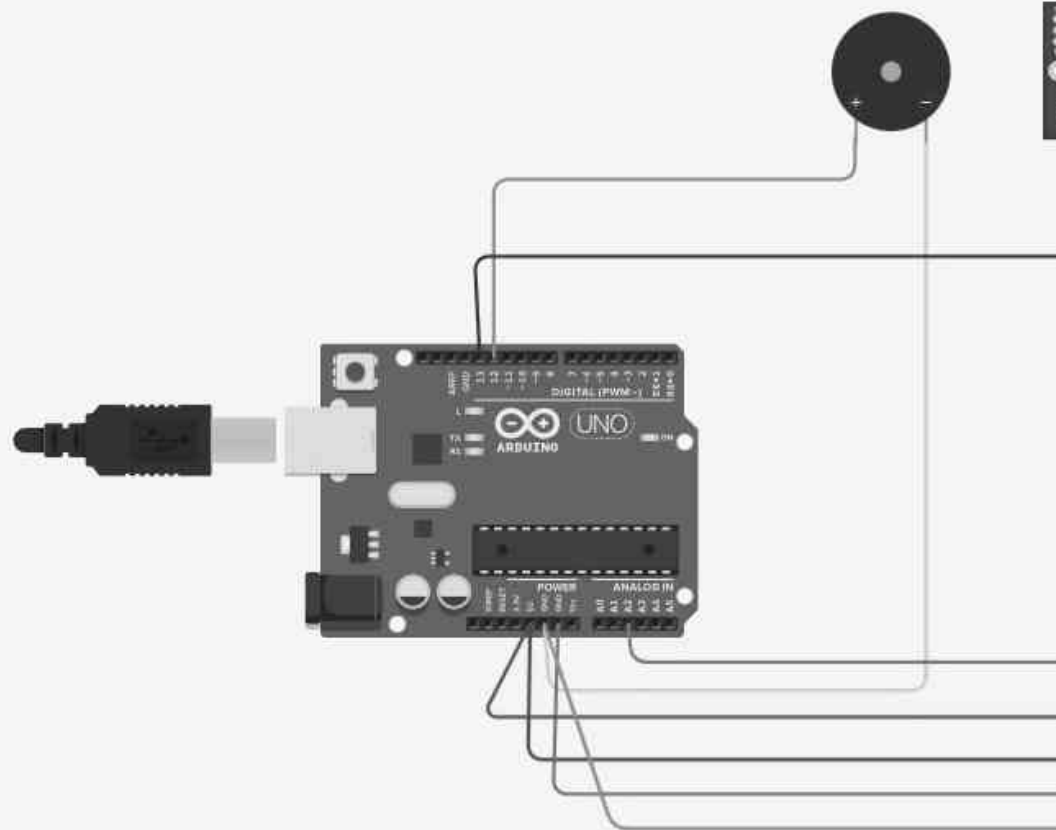
Send To

Text



A

1 (Arduino Uno R3)



```
31 {
32   digitalWrite(LED,HIGH); //Turn LED ON
33   digitalWrite(Buzz,HIGH); //Turn Buzzer ON
34   Serial.println("Temperature is High");//Print this in Serial
35 }
36 if (temperature<40&&temperature<30)
37 {
38   digitalWrite(LED,LOW);
39   digitalWrite(Buzz,LOW);
40   Serial.println("Temperature is normal");
41 }
42
43 else
44 {
45   digitalWrite(LED,LOW);
46   digitalWrite(Buzz,LOW);
47   Serial.print("Temperature is low");
48 }
49
50 val=digitalRead(PIR); //The value read from PIR pin will be assigned
51 if (val==HIGH) {
52   digitalWrite(LED,HIGH); //Turn LED ON
53   digitalWrite(Buzz,HIGH); //Turn Buzzer ON
54   Serial.println("Movement Detected");//Print this text in Serial
55 }
56 else
57 {
58   digitalWrite(LED,LOW);
59   digitalWrite(Buzz,LOW);
60   Serial.println("Movement not Detected");
61 }
62 }
```

Serial Monitor

TINKERCAD

Sizzling Fulffy-Gogo

Saved

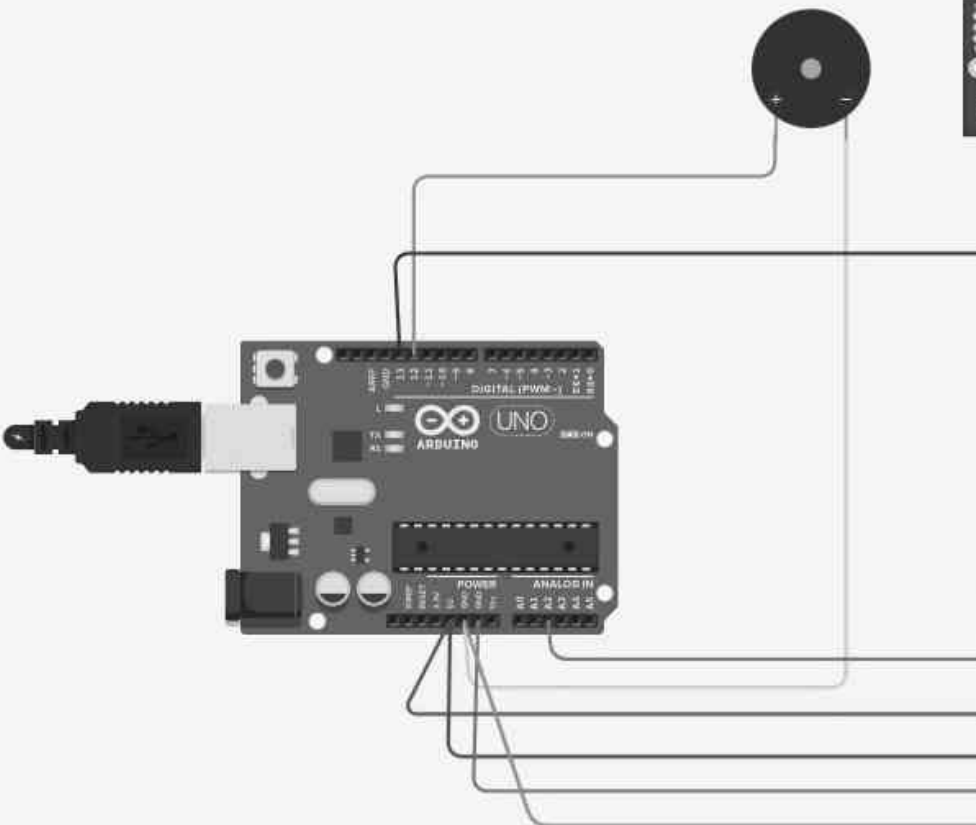
Simulator time: 00:00:10

Code

Stop Simulation

Send To

1 (Arduino Uno R3)



```
31 //
32 digitalWrite(LED,HIGH); //Turn LED ON
33 digitalWrite(Buzz,HIGH); //
34 Serial.println("Temperature is High");
35 }
36 if(temperature<40&&temperature>30)
37 {
38   digitalWrite(LED,LOW);
39   digitalWrite(Buzz,LOW);
40   Serial.println("Temperature is low");
41 }
42 else
43 {
44   digitalWrite(LED,LOW);
45   digitalWrite(Buzz,LOW);
46   Serial.print("Temperature is low");
47 }
48 }
49
50 val=digitalRead(PIR); //The value read from PIR pin will be assigned to val
51 if(val==HIGH){
52   digitalWrite(LED,HIGH); //Turn LED ON
53 }
```

How the debugger works

1. Add breakpoints by clicking on the line numbers.
2. Hover over the variables while paused to see their value.
3. Use the buttons above to resume simulation or step one line at a time.

Serial Monitor

Temperature is lowMovement not Detected  
226.86Â°C  
Temperature is High  
Temperature is lowMovement not Detected  
286.43Â°C  
Temperature is High  
Temperature is lowMovement not Detected  
281.05Â°C

Send Clear