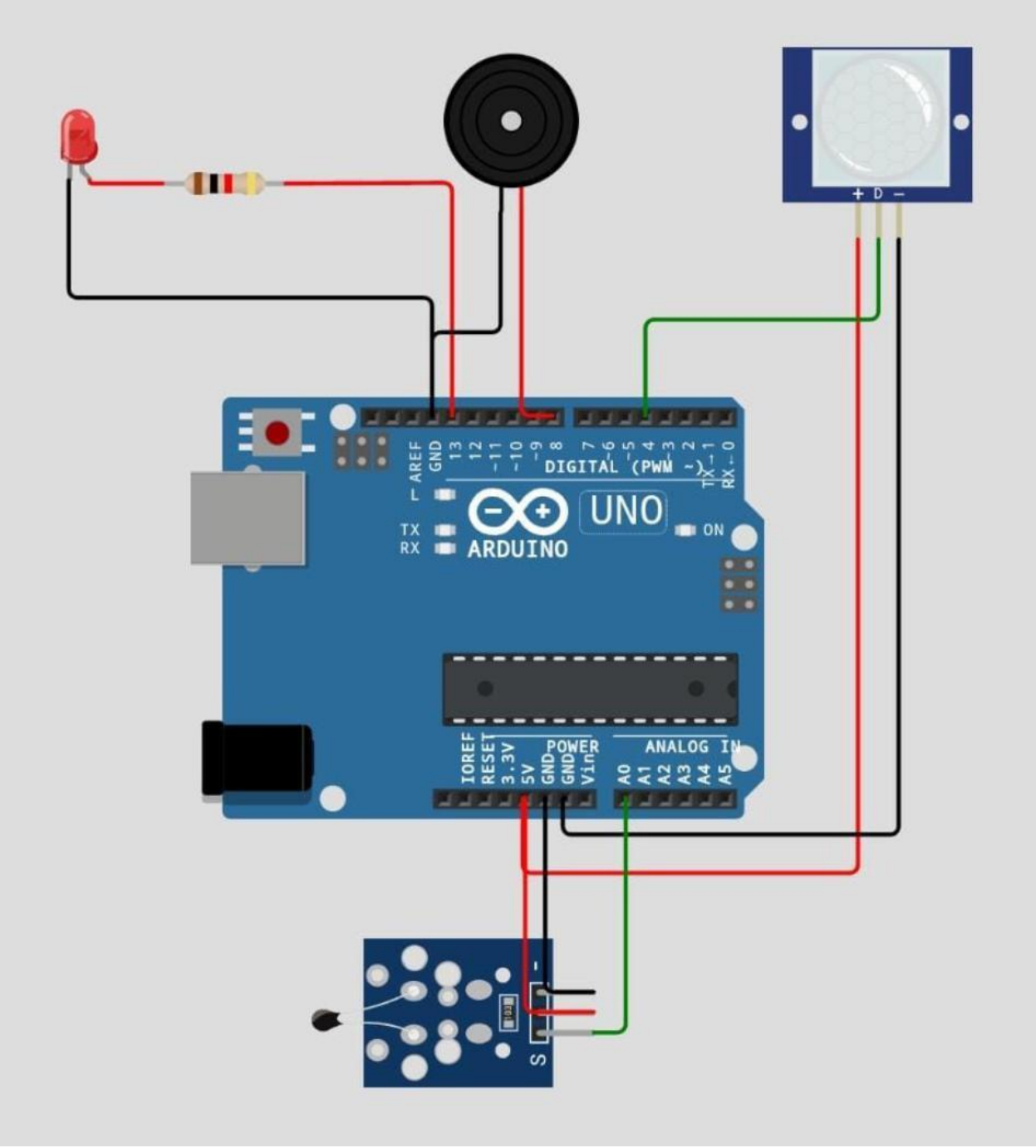
```
int sensor;



void setup() {
  // put your setup code here, to run once:
  Serial.begin(115200);
  pinMode(4, INPUT);
  pinMode(A0, INPUT);
  pinMode(13, OUTPUT);
  pinMode(8, OUTPUT);



}

void loop() {
  // put your main code here, to run repeatedly:
  digitalRead(4);
  const float BETA = 3950; // should match the Beta Coefficient of the thermistor
  int analogValue = analogRead(A0);
  float celsius = 1 / (log(1 / (1023. / analogValue - 1)) / BETA + 1.0 / 298.15) - 273.15;
  Serial.println(analogValue);
  Serial.println(celsius);
  if(celsius < 32){
    if( sensor == 0){
      sensor = 0;
      delay(1000);
    }
    Serial.println("Temperature is normal");
    Serial.println(celsius);
```

```
  digitalWrite(13, LOW);
  no tone(8);
  delay(1000);
}
else{
  sensor = 1;
  Serial.println("Turn on the AC");
  Serial.println(celsius);
  tone(8, HIGH);
  digitalWrite(13, HIGH);
  delay(1000);
}

if(digitalRead(4) == LOW){
  if( sensor == 0){
    sensor = 0;
    delay(1000);

  }
  digitalWrite(13, LOW);
  no tone(8);
  Serial.println("No object in sight");
  delay(1000);
}

else{

  Serial.println("Object detected");
  sensor = 1;
```

```
  tone(8, HIGH);
  digitalWrite(13, HIGH);
  Serial.println(digitalRead(4));
  delay(1000);
}


// this speeds up the simulation
```

}



Link : https://wokwi.com/projects/362877092857452545