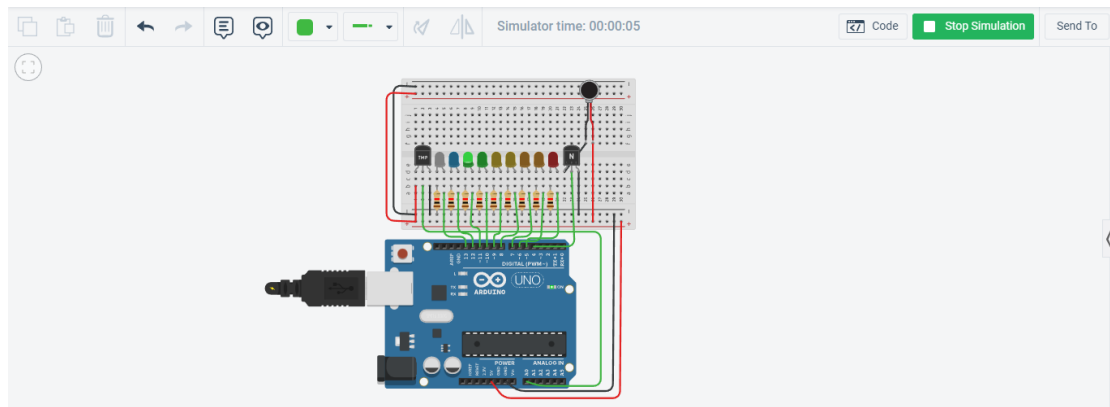


Temperature Sensor and Buzzer With Arduino

DIAGRAM:



CODE:

```
const int white = 13;
const int blue = 12;
const int green1 = 11;
const int green2 = 10;
const int yellow1 = 9;
const int yellow2 = 8;
const int orange1 = 7;
const int orange2 = 6;
const int red = 5;
const int buzzer = 4;
int baselineTemp = 0;
int celsius = 0;

void setup()
{
  pinMode(A0, INPUT);
  Serial.begin(9600);

  pinMode(green2, OUTPUT);
  pinMode(yellow2, OUTPUT);
  pinMode(red, OUTPUT);
  pinMode(green1, OUTPUT);
  pinMode(yellow1, OUTPUT);
  pinMode(orange1, OUTPUT);
  pinMode(orange2, OUTPUT);
}
```

```

pinMode(blue, OUTPUT);
pinMode(white, OUTPUT);
pinMode(buzzer, OUTPUT);
}

void loop()
{
  baselineTemp = 0;

  celsius = map(((analogRead(A0) - 20) * 3.04), 0, 1023, -40, 125);

  if (celsius < baselineTemp) {
    digitalWrite(white, LOW);
    digitalWrite(blue, LOW);
    digitalWrite(green1, LOW);
    digitalWrite(green2, LOW);
    digitalWrite(yellow1, LOW);
    digitalWrite(yellow2, LOW);
    digitalWrite(orange1, LOW);
    digitalWrite(orange2, LOW);
    digitalWrite(red, LOW);
    digitalWrite(buzzer, LOW);
    whiteflashing();
  }
  if (celsius >= baselineTemp && celsius < baselineTemp + 15) {
    digitalWrite(white, LOW);
    digitalWrite(blue, HIGH);
    digitalWrite(green1, LOW);
    digitalWrite(green2, LOW);
    digitalWrite(yellow1, LOW);
    digitalWrite(yellow2, LOW);
    digitalWrite(orange1, LOW);
    digitalWrite(orange2, LOW);
    digitalWrite(red, LOW);
    digitalWrite(buzzer, LOW);
  }
  if (celsius >= baselineTemp + 15 && celsius < baselineTemp + 30) {
    digitalWrite(white, LOW);
    digitalWrite(blue, LOW);
    digitalWrite(green1, HIGH);
    digitalWrite(green2, LOW);
    digitalWrite(yellow1, LOW);
    digitalWrite(yellow2, LOW);
    digitalWrite(orange1, LOW);
    digitalWrite(orange2, LOW);
    digitalWrite(red, LOW);
    digitalWrite(buzzer, LOW);
  }
  if (celsius >= baselineTemp + 30 && celsius < baselineTemp + 45) {
    digitalWrite(white, LOW);

```

```

digitalWrite(blue, LOW);
digitalWrite(green1, HIGH);
digitalWrite(green2, HIGH);
digitalWrite(yellow1, LOW);
digitalWrite(yellow2, LOW);
digitalWrite(orange1, LOW);
digitalWrite(orange2, LOW);
digitalWrite(red, LOW);
digitalWrite(buzzer, LOW);
}
if (celsius >= baselineTemp + 45 && celsius < baselineTemp + 60) {
digitalWrite(white, LOW);
digitalWrite(blue, LOW);
digitalWrite(green1, LOW);
digitalWrite(green2, LOW);
digitalWrite(yellow1, HIGH);
digitalWrite(yellow2, LOW);
digitalWrite(orange1, LOW);
digitalWrite(orange2, LOW);
digitalWrite(red, LOW);
digitalWrite(buzzer, LOW);
}
if (celsius >= baselineTemp + 60 && celsius < baselineTemp + 75){
digitalWrite(white, LOW);
digitalWrite(blue, LOW);
digitalWrite(green1, LOW);
digitalWrite(green2, LOW);
digitalWrite(yellow1, HIGH);
digitalWrite(yellow2, HIGH);
digitalWrite(orange1, LOW);
digitalWrite(orange2, LOW);
digitalWrite(red, LOW);
digitalWrite(buzzer, LOW);
}
if (celsius >= baselineTemp + 75 && celsius < baselineTemp + 90){
digitalWrite(white, LOW);
digitalWrite(blue, LOW);
digitalWrite(green1, LOW);
digitalWrite(green2, LOW);
digitalWrite(yellow1, LOW);
digitalWrite(yellow2, LOW);
digitalWrite(orange1, HIGH);
digitalWrite(orange2, LOW);
digitalWrite(red, LOW);
digitalWrite(buzzer, LOW);
}
if (celsius >= baselineTemp + 90 && celsius < baselineTemp + 100){
digitalWrite(white, LOW);
digitalWrite(blue, LOW);
digitalWrite(green1, LOW);

```

```
    digitalWrite(green2, LOW);
    digitalWrite(yellow1, LOW);
    digitalWrite(yellow2, LOW);
    digitalWrite(orange1, HIGH);
    digitalWrite(orange2, HIGH);
    digitalWrite(red, LOW);
    digitalWrite(buzzer, LOW);
}
if (celsius >= baselineTemp + 100){
    digitalWrite(white, LOW);
    digitalWrite(blue, LOW);
    digitalWrite(green1, LOW);
    digitalWrite(green2, LOW);
    digitalWrite(yellow1, LOW);
    digitalWrite(yellow2, LOW);
    digitalWrite(orange1, LOW);
    digitalWrite(orange2, LOW);
    digitalWrite(buzzer, LOW);
    redflashing();
}
delay(100);
}
```

```
void redflashing(){
    digitalWrite(buzzer, HIGH);
    digitalWrite(red, HIGH);
    delay(500);
    digitalWrite(red, LOW);
    delay(500);
}
```

```
void whiteflashing(){
    digitalWrite(buzzer, HIGH);
    digitalWrite(white, HIGH);
    delay(500);
    digitalWrite(white, LOW);
    delay(500);
}
```