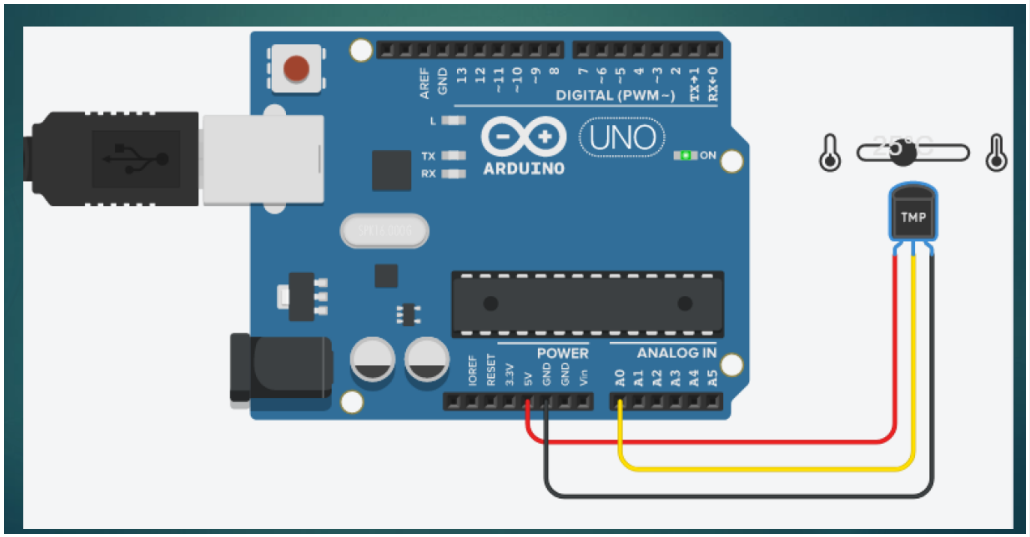
IoT κύκλωμα

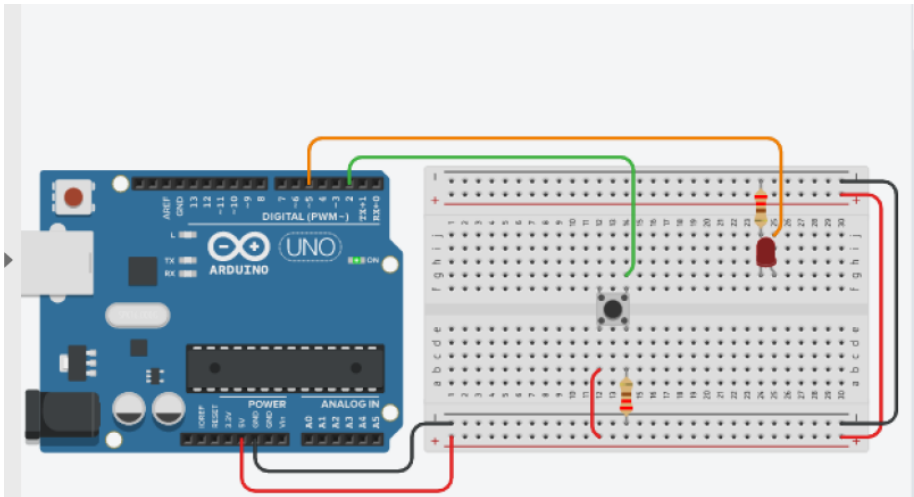
Σύνδεση αισθητηρίου θερμοκρασίας




```
int sensorValue = 0;
int sensorPin = A0;

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

void loop()
{
  sensorValue = analogRead(A0);
  Serial.println(sensorValue);
  delay(100);  // waits by about 0.1 sec
}
```

```
// Convert that reading into voltage
  float voltage = sensorValue* (5.0 / 1024.0);

  // Convert the voltage into the temperature
in Celsius
  float temperatureC = voltage * 100;
```

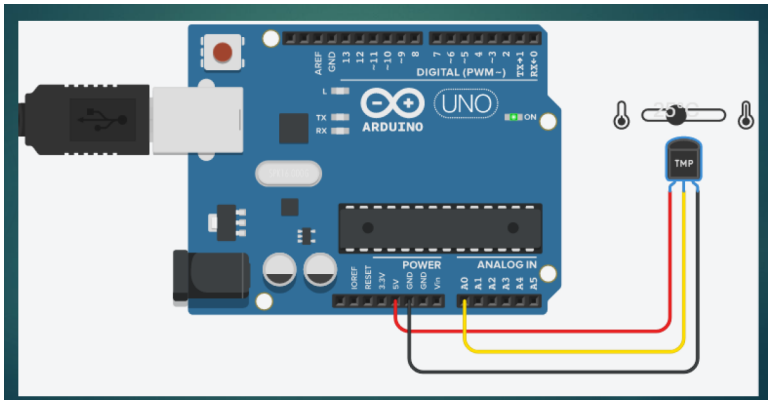
Σύνδεση Μπουτόν

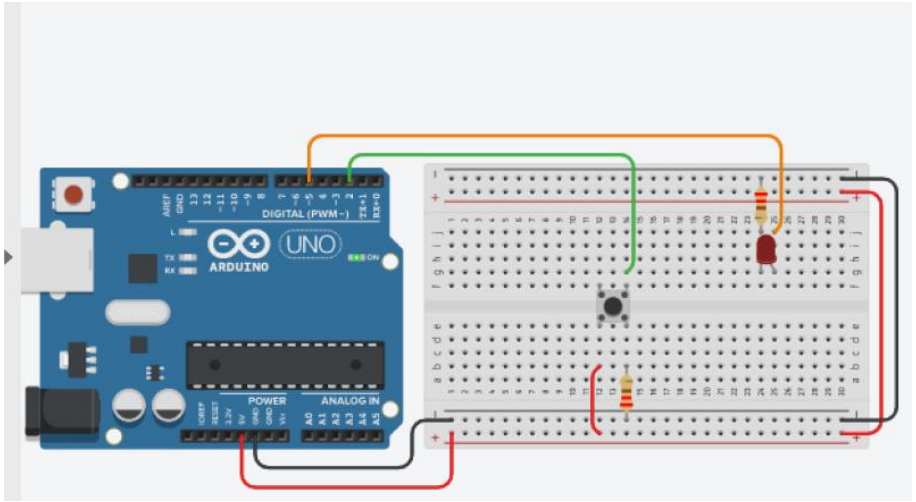


1 (Arduino Uno R3)

```ino
int buttonState = 0; // Initialize button state

void setup()
{
  pinMode(2, INPUT); // Set pin 2 as input
  pinMode(5, OUTPUT); // Set pin 5 as output
}

void loop()
{
  // read the state of the pushbutton value
  buttonState = digitalRead(2);

  // check if pushbutton is pressed.
  if (buttonState == HIGH) // if it is, the buttonState is HIGH
  {
    digitalWrite(5, HIGH); // turn LED on
  }
  else // if it is not pressed, the buttonState is LOW
  {
    digitalWrite(5, LOW); // turn LED off
  }
  delay(10); // Delay a little bit to improve simulation performance
}
```

Σύνδεση αισθητηρίου θερμοκρασίας με led






```
int buttonState=0;
int sensorvalue =0;

void setup() {
      Serial.begin (9600);
      pinMode (2, INPUT);
      pinMode (5, OUTPUT);
      pinMode(A0,INPUT);
}
void loop() {
      sensorvalue = analogRead(A0);
      buttonState = digitalRead(2);
      float temp_val;
      temp_val = (sensorvalue * 0.488);

      if (temp_val > 22.0)
      {
            digitalWrite(5,HIGH);
      }
      else
      {
            digitalWrite(5,LOW);
       }

       Serial.print(temp_val);
       Serial.print(" ");
       Serial.println(buttonState);
       delay(500);
}
```

Σύνδεση αισθητηρίου θερμοκρασίας

- Εγκατάσταση coolterm
- Δημιουργία αρχείου αποθήκευσης δεδομένων
- Ορισμός του αρχείου στο coolterm
- Έναρξη καταγραφής δεδομένων

Προσοχή!!! Να καταγράφεται και το timestamp