**Humidity Sensor :**

<https://www.brainy-bits.com/post/how-to-use-the-dht11-temperature-and-humidity-sensor-with-an-arduino>

#include "dht.h"

#define dht\_apin A0 // Analog Pin sensor is connected to

dht DHT;

void setup(){

  Serial.begin(9600);

  delay(500);//Delay to let system boot

  Serial.println("DHT11 Humidity & temperature Sensor\n\n");

  delay(1000);//Wait before accessing Sensor

}//end "setup()"

void loop(){

  //Start of Program

    DHT.read11(dht\_apin);

    Serial.print("Current humidity = ");

    Serial.print(DHT.humidity);

    Serial.print("%  ");

    Serial.print("temperature = ");

    Serial.print(DHT.temperature);

    Serial.println("C  ");

    delay(5000);//Wait 5 seconds before accessing sensor again.

  //Fastest should be once every two seconds.

}//

# Soil Moisture Sensor :

<https://create.arduino.cc/projecthub/MisterBotBreak/how-to-use-a-soil-moisture-sensor-ce769b?ref=search&ref_id=soil%20&offset=8>

int sensorPin = A0;

int sensorValue;

int limit = 300;

void setup() {

 Serial.begin(9600);

 pinMode(13, OUTPUT);

}

void loop() {

 sensorValue = analogRead(sensorPin);

 Serial.println("Analog Value : ");

 Serial.println(sensorValue);

 if (sensorValue<limit) {

 digitalWrite(13, HIGH);

 }

 else {

 digitalWrite(13, LOW);

 }

 delay(1000);

}

**Seconed Code**

[**https://lastminuteengineers.com/soil-moisture-sensor-arduino-tutorial/**](https://lastminuteengineers.com/soil-moisture-sensor-arduino-tutorial/)

/\* Change these values based on your calibration values \*/

#define soilWet 500   // Define max value we consider soil 'wet'

#define soilDry 750   // Define min value we consider soil 'dry'

// Sensor pins

#define sensorPower 7

#define sensorPin A0

void setup() {

  pinMode(sensorPower, OUTPUT);

  // Initially keep the sensor OFF

  digitalWrite(sensorPower, LOW);

  Serial.begin(9600);

}

void loop() {

  //get the reading from the function below and print it

  int moisture = readSensor();

  Serial.print("Analog Output: ");

  Serial.println(moisture);

  // Determine status of our soil

  if (moisture < soilWet) {

    Serial.println("Status: Soil is too wet");

  } else if (moisture >= soilWet && moisture < soilDry) {

    Serial.println("Status: Soil moisture is perfect");

  } else {

    Serial.println("Status: Soil is too dry - time to water!");

  }

  delay(1000);  // Take a reading every second for testing

          // Normally you should take reading perhaps once or twice a day

  Serial.println();

}

//  This function returns the analog soil moisture measurement

int readSensor() {

  digitalWrite(sensorPower, HIGH);  // Turn the sensor ON

  delay(10);              // Allow power to settle

  int val = analogRead(sensorPin);  // Read the analog value form sensor

  digitalWrite(sensorPower, LOW);   // Turn the sensor OFF

  return val;             // Return analog moisture value

}