SPRINT - 1

Date	14 November 2022
Team ID	PNT2022TMID04642
Project Name	Smart Farmer-IoT Enabled Smart Farming Application

Connecting sensors using Arduino

```
#include "Arduino.h"
#include  "dht.h”
 #include "SoilMoisture.h"
#define dht_apin A0

const int sensor_pin = A1; \
//soil moisture
 int pin_out = 9;
dht DHT;
 int c=0;
 void setup()
{
 pinMode(2, INPUT);  //Pin 2 as INPUT
pinMode(3, OUTPUT); //PIN 3 as OUTPUT
 pinMode(9, OUTPUT);  //output for pump
}
void loop()
{
if (digitalRead(2) == HIGH)
{
 digitalWrite(3, HIGH); // turn the LED/Buzz ON
 delay(10000);  // wait for 100 msecond
 digitalWrite(3, LOW); // turn the LED/Buzz OFF
 delay(100);
}
 Serial.begin(9600);
```

```
delay(1000);
DHT.read11(dht_apin); //temprature
float h=DHT.humidity;
float t=DHT.temperature;
 delay(5000);
 Serial.begin(9600);
float moisture_percentage;
 int sensor_analog;
sensor_analog = analogRead(sensor_pin);
 moisture_percentage = ( 100 - ( (sensor_analog/1023.00) * 100 ) );
 float m=moisture_percentage;
 delay(1000);
 if(m=0) { mySerial.begin(9600);
 delay(15000);
Serial.begin(9600);
 delay(1000);
 Serial.print("\r");
 delay(1000);
Serial.print((String)"update --> "+(String)" Temprature =   "+t+(String)"Humidity = "+h+(String)
"Moisture = "+m);
 delay(1000);
 }
 }
```