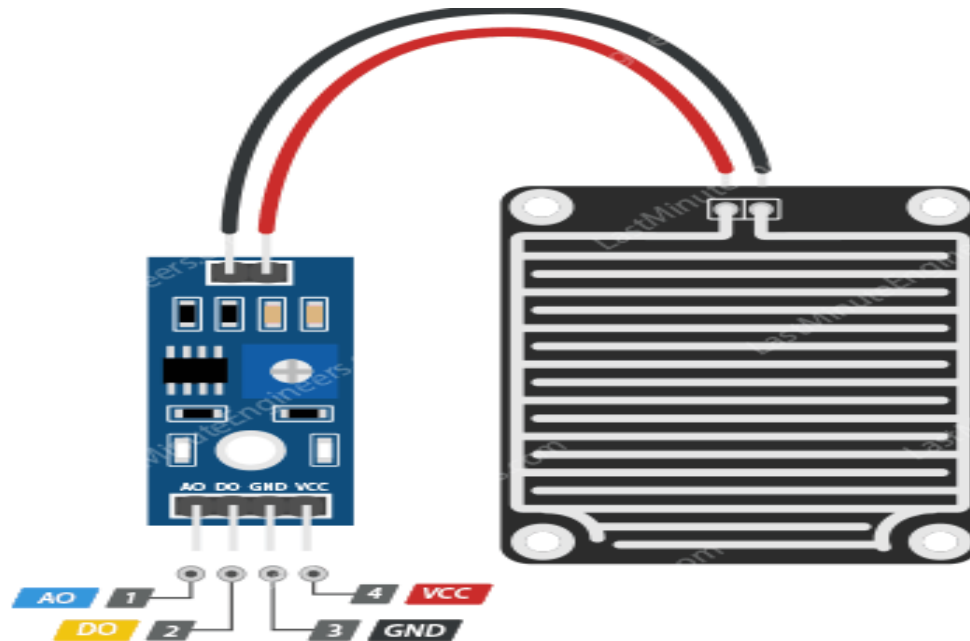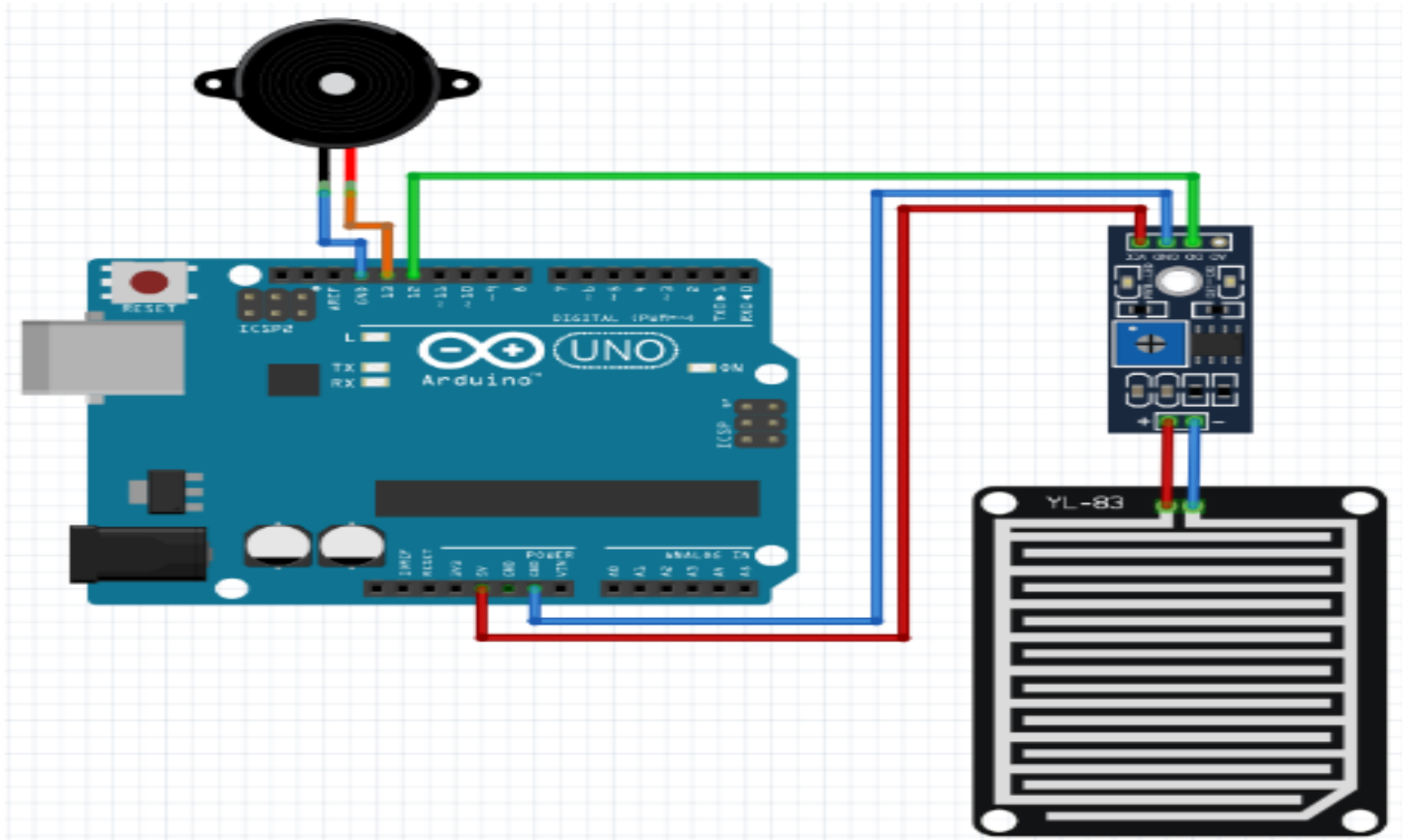RAIN AND WATER SENSOR

What is Rain Water Sensor ?

➢ **A rain sensor is one kind of switching device which is used to detect the rainfall.**

➢ **We can take digital (DO pin) as well as analog (AO pin) output from this sensor.**

Circuit Connection for RW Sensor

Coding for RW Sensor
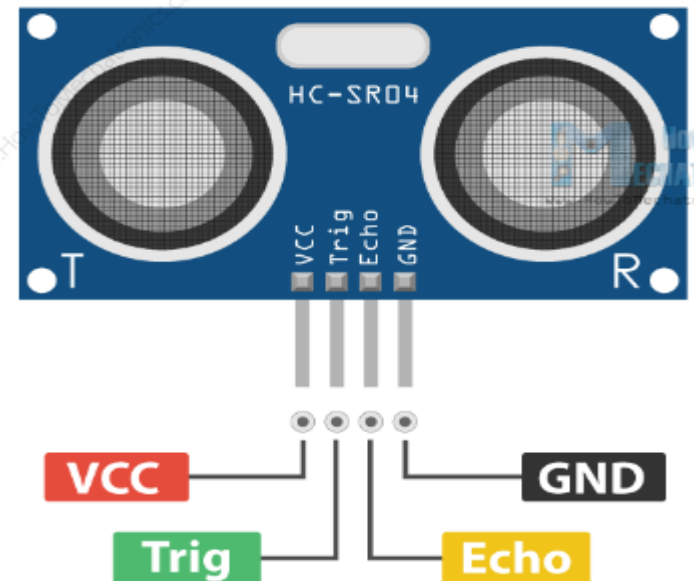
```
#define rainfall A0
#define buzzer 13
int value;
int set=10;

void setup()
{
Serial.begin(9600);
pinMode(13,OUTPUT);
pinMode(A0,INPUT);
}

void loop()
{
value = analogRead(rainfall);
Serial.println(value);
value =
map(value,0,1023,225,0);
if(value>=set){
Serial.println("rain detected");
digitalWrite(buzzer,HIGH);}
else{
digitalWrite(buzzer, LOW);
}}
```
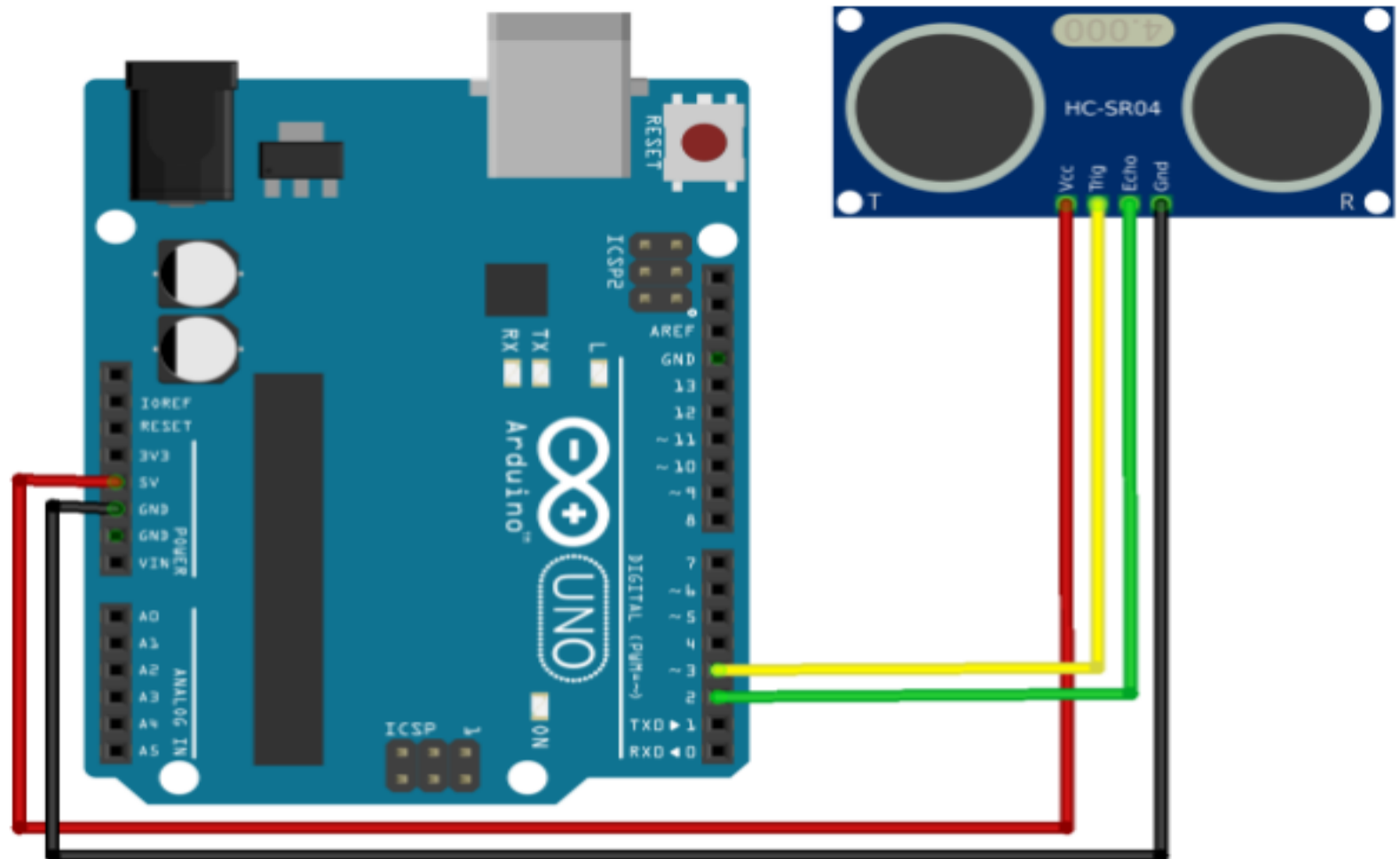
What is Ultrasonic Sensor ?

❖ **Ultrasonic sensors are also called Proximity sensors. They can be found in automobile self-parking technology and anti-collision safety systems.**

❖ **Ultrasonic sensors are also used in robotic obstacle detection systems, as well as manufacturing technology.**

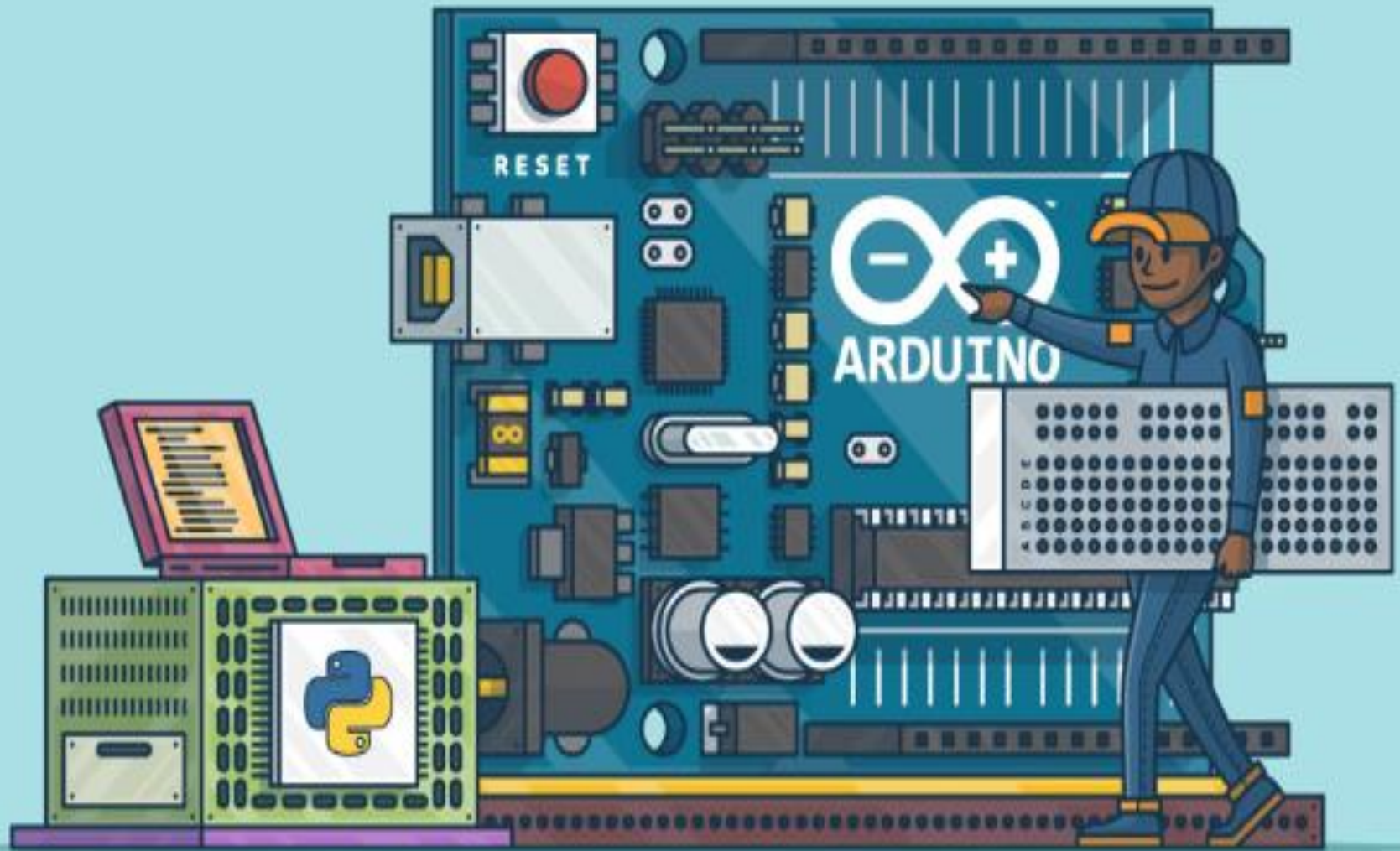# Circuit Connection for Ultrasonic sensor

Coding part.....!!

```
int const trigPin=3;

int const echoPin=2;

void setup()
{
pinMode (trigPin,OUTPUT);
pinMode(echoPin,INPUT);
Serial.begin(9600);
}
```

```
void loop(){
int duration,distance;
digitalWrite(trigPin,HIGH);
delay(100);
digitalWrite(trigPin,LOW);
duration=pulseIn(echoPin,HIGH);
    distance=(duration/2)*0.0343;
Serial.print("distance:");
Serial.print(distance);
Serial.println();
}
```

THANK YOU !