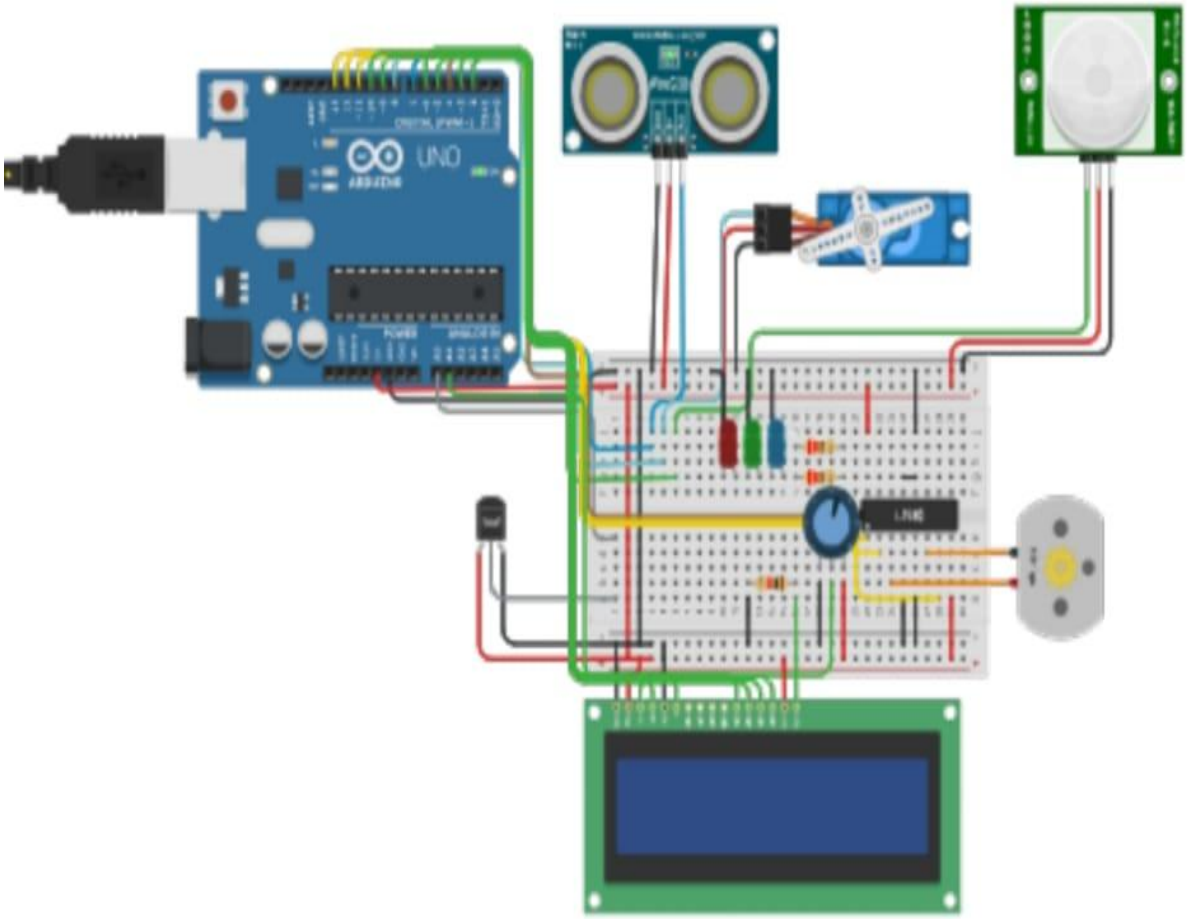
UNO
ARDUINO

```
#include<Servo.h>
#include<LiquidCrystal.h>
LiquidCrystal lcd(A1,10,9,6,5,3);
float value;
int tmp = A0;
const int pingPin = 7;
int servoPin = 8;
Servo servo1;
void setup()
{
  Serial.begin(9600);
  servo1.attach(servoPin);
  lcd.begin(16, 2);
  pinMode(2,INPUT);
  pinMode(4,OUTPUT);
  pinMode(11,OUTPUT);
  //pinMode(10,INPUT);
  //pinMode(2,OUTPUT);
  //pinMode(8,OUTPUT);
  //pinMode(9,output);
  //pinMode(11,OUTPUT);
  //pinMode(13,OUTPUT);
  pinMode(12,OUTPUT);
  pinMode(13,OUTPUT);
```

```
  pinMode(A0,INPUT);
  digitalWrite(2,LOW);
  digitalWrite(11,HIGH);
  //digitalWrite(5,OUTPUT);
  digitalWrite(3,OUTPUT);
  digitalWrite(7,OUTPUT);
  digitalWrite(11,OUTPUT);
  digitalWrite(13,OUTPUT);
}
void loop()
{
  long duration, inches, cm;
  pinMode(pingPin, OUTPUT);
  digitalWrite(pingPin, LOW);
  delayMicroseconds(2);
  digitalWrite(pingPin, HIGH);
  delayMicroseconds(5);
  digitalWrite(pingPin, LOW);
  pinMode(pingPin, INPUT);
  duration = pulseIn(pingPin, HIGH);
  inches = microsecondsToInches(duration);
  cm = microsecondsToCentimeters(duration);
servo1.write(0);
 if(cm < 40)
```

```
{
  servo1.write(90);
  lcd.setCursor(0,1);
  lcd.print("Door:OPEN");
}
else
{
  servo1.write(0);
  lcd.setCursor(0,1);
  lcd.print("Door:CLOSED");
}
int pir = digitalRead(2);
if(pir == HIGH)
{
  digitalWrite(4,HIGH);
  lcd.setCursor(10,0);
  lcd.print("LED:ON");
}
else if(pir == LOW)
   lcd.setCursor(12,0);
  lcd.print("OFF");
{
  digitalWrite(4,LOW);
}
```

```
 value = analogRead(tmp)*0.004882814;
  value = (value - 0.5) * 100.0;
  lcd.setCursor(0,0);
            lcd.print("Tmp:");
            lcd.print(value);
            delay(1000);
  Serial.println("temperature");
  Serial.println(value);
  if(value > 20)
  {
    digitalWrite(12,HIGH);
    digitalWrite(13,LOW);
  }
  else
  {
    digitalWrite(12,LOW);
    digitalWrite(13,LOW);
  }
  lcd.clear();
}
long microsecondsToInches(long microseconds)
 {
 return microseconds / 74 / 2;
}
```