**IOT ASSIGNMENT-4**

int echopin=4;

int trigpin=5;

int led=2;

#include "BluetoothSerial.h"

BluetoothSerial SerialBT;

void setup() {

pinMode(echopin,INPUT);

pinMode(trigpin,OUTPUT);

pinMode(led,OUTPUT);

Serial.begin(115200);

delay(2000);

Serial.println("data");

SerialBT.begin("ESP32test"); //Bluetooth device name

Serial.println("The device has started, now you can pair it with bluetooth!");

}

void loop() {

int Data= (SerialBT.read());

digitalWrite(trigpin,HIGH);

delay(1000);

digitalWrite(trigpin,LOW);

int duration=pulseIn(echopin,HIGH);

int distance=duration\*0.0343/2;

//Serial.print("the distance is..");

//Serial.println(distance);

delay(3000);

if (distance<154)

{

Serial.print("the distance is..");

Serial.println(distance);

Serial.println("water level is full, pump is to be switched off");

SerialBT.print("water level is..");

SerialBT.println(distance);

digitalWrite(led,LOW);

Serial.write(SerialBT.read());//(0=pump off)

delay(1000);

}

else

{

Serial.print("the distance is..");

Serial.println(distance);

Serial.println("water level is low, pump is to be switched on");

SerialBT.print("water level is..");

SerialBT.println(distance);

digitalWrite(led,HIGH);

Serial.write(SerialBT.read());//(1=pump on)

delay(1000);

}

delay(20);

}

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**M.SHIVANI**