

```

float x,y;                                //TEMP
#define trigPin 12                        //ULTRA
#define echoPin 10
int ledPin= 13;
int duration, distance; //ULTRA

#include<Servo.h>                          //servo
Servo my;                                //servo

char val;                                //bluetooth

void setup() {
  Serial.begin(9600);
  pinMode(2,INPUT); //IR GATE FIRST
  pinMode(3,INPUT);
  my.attach(11);    //servo

  pinMode(4, OUTPUT);    //IR GATE FIRST

  pinMode(7,OUTPUT);    //TEM
  pinMode(8,INPUT);    //pir 1
  pinMode(9,OUTPUT);    //LED 1
  // pinMode(10,INPUT);    //pir 2
  //pinMode(11,OUTPUT);    //LED2
  pinMode(trigPin, OUTPUT); //12 PIN ULTRA
  pinMode(echoPin, INPUT); //10 PIN ULTRA
  pinMode(ledPin, OUTPUT); //13 PIN ULTRA

  pinMode(3,OUTPUT);    //bluetooth
}

void loop() {
  x=analogRead(0);    //TEMP
  y=((x/1024)*5)*100;
  Serial.println(y);
  delay(500);

  if(y>44)
  {
    digitalWrite(7,1);
  }
}

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else
{
digitalWrite(7,0);
delay(500);
}

//TEMP

if(digitalRead(8)==HIGH) //pir
{
digitalWrite(9,HIGH);
}
else
{ digitalWrite(9,LOW);}

digitalWrite(trigPin, HIGH); //ULTRA
delayMicroseconds(10);
digitalWrite(trigPin, LOW);
duration = pulseIn(echoPin, HIGH);
distance = (duration/2) / 29.1;

if (distance >= 10 || distance <= 0)
{
// Serial.println("no object detected");

digitalWrite(ledPin,LOW);
}
else
{
Serial.println("object detected \n");
Serial.print("distance= ");

Serial.print(distance);
digitalWrite(ledPin,HIGH);
} //ULTRA
if(digitalRead(2)==HIGH) //gate first
{
my.write(0); //servo

}
else

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{
    my.write(90);          //servo
}

analogRead(5);            //ldr
float a = analogRead(5);
Serial.println(a);

    if (a <=200) {

        digitalWrite(4,1);
        Serial.println("LDR is DARK, LED is ON");

    }
    else {

        digitalWrite(4,0);
        Serial.println("-----");

    }                                //ldr

if (Serial.available())
//bluetooth
{
    val = Serial.read();
    Serial.println(val);

    if(val == 'TV')
        digitalWrite(3,HIGH);

    else if(val == 'tv')
        digitalWrite(3,LOW);

}
//bluetooth

```