

```

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);
  }
  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
{
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

}
```