

```
float x,y;  
  
#define trigPin 12  
  
#define echoPin 10  
  
int ledPin= 13;  
  
int duration, distance;  
  
  
#include<Servo.h>  
  
Servo my;  
  
  
char val;  
  
  
void setup() {  
  Serial.begin(9600);  
  pinMode(2,INPUT);  
  pinMode(3,INPUT);  
  my.attach(11);  
  
  
  pinMode(4, OUTPUT);  
  
  
  pinMode(7,OUTPUT);  
  pinMode(8,INPUT);  
  pinMode(9,OUTPUT);  
  pinMode(10,INPUT);  
  pinMode(11,OUTPUT);
```

```
pinMode(trigPin, OUTPUT);
pinMode(echoPin, INPUT);
pinMode(ledPin, OUTPUT);

pinMode(3,OUTPUT);
}
```

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

    if(y>44)
    {
        digitalWrite(7,1);
    }
    else
    {
        digitalWrite(7,0);
    }
    delay(500);
```

```
}

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

digitalWrite(trigPin, HIGH);
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);

}

if(digitalRead(2)==HIGH)
{
my.write(0);

}

else
{
my.write(90);

}

analogRead(5);

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("----");  
  
}  
  
if (Serial.available())  
{  
  
    val = Serial.read();  
  
    Serial.println(val);  
  
    if(val == 'TV')  
        return;  
}
```

```
digitalWrite(3,HIGH);
```

```
else if(val == 'tv')
```

```
digitalWrite(3,LOW);
```

```
}
```

```
}
```