```cpp
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);
```

```arduino
  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')
```

```
    digitalWrite(3,HIGH);


  else if(val == 'tv')

  digitalWrite(3,LOW);



   }



}
```