```
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(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)
  {
  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')
  digitalWrite(3,HIGH);
else if(val == 'tv')
  digitalWrite(3,LOW);
}
}
```