

Smart Dustbin

```
#include <Servo.h>
#define trigPin 7
#define echoPin 6
Servo servo;
void setup()
{
  Serial.begin (9600);
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
  servo.attach(8);
}
void loop()
{
  long duration, distance;
  digitalWrite(trigPin, LOW);
  delayMicroseconds(2);
  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW);
  duration = pulseIn(echoPin, HIGH);
  distance = (duration/2) / 29.1;
  if (distance < 10)
  {
    Serial.println("the distance is less than 10");
    servo.write(160);
    delay(3000);
  }
  else
  {
    servo.write(0);
  }
  delay(500);
}
```