

SMART DUSTBIN CODE

```
#include<Servo.h>
int green = 13;
int blue = 12;
int buzzer = 10;
int trigger = 11;
int echo = 8;
long tim;
int cm, inch, a=0;
Servo pwm_pin;

void setup()
{
  pinMode(green,OUTPUT);
  pinMode(blue,OUTPUT);
  pinMode(buzzer,OUTPUT);
  pinMode(trigger,OUTPUT);
  pinMode(echo,INPUT);
  pwm_pin.attach(9);
  Serial.begin(9600);
  digitalWrite(blue,1);
}
void loop()
{

  digitalWrite(trigger,LOW);
  delayMicroseconds(2);
  digitalWrite(trigger,HIGH);
  delayMicroseconds(10);
  digitalWrite(trigger,LOW);
  tim = pulseIn(echo,HIGH);
  cm = 0.017*tim;
  inch = cm/2.54;
  Serial.print(inch);
  Serial.println("inch");
  if(inch<=10&&a==0)
  {
    a=1;
    digitalWrite(blue,0);
    pwm_pin.write(180);
```

```
    delay(15);  
    digitalWrite(green,1);  
    digitalWrite(buzzer,1);  
    delay(200);  
    digitalWrite(buzzer,0);  
}  
  
else if(inch>20)  
{  
    digitalWrite(green,0);  
    pwm_pin.write(0);  
    delay(15);  
    digitalWrite(blue,1);  
    a=0;  
}  
}
```