```
#include<Servo.h>

int dist = 0;

int gassensor = 0;


long readUltrasonicDistance(int triggerPin, int echoPin)

{

  pinMode(triggerPin, OUTPUT);

  digitalWrite(triggerPin, LOW);

  delayMicroseconds(2);


  digitalWrite(triggerPin, HIGH);

  delayMicroseconds(10);

  digitalWrite(triggerPin, LOW);

  pinMode(echoPin, INPUT);

  return pulseIn(echoPin, HIGH);

}


/*void gassensorfts()

{

  gassensor = analogRead(A0);

  if (gassensor >= 250) {

    tone(7, 523, 1000); // play tone 60 (C5 = 523 Hz)

  }

  delay(10);

}*/

Servo mainServo;


void setup()

{

  mainServo.attach(8, 500, 2500);

  pinMode(13,OUTPUT);
```

```
 pinMode(4,INPUT);
 pinMode(12,OUTPUT);
 pinMode(A0, INPUT);
 pinMode(12, OUTPUT);
 Serial.begin(9600);
}

void loop()
{
 dist = 0.01723 * readUltrasonicDistance(7, 7);
 if (dist <= 100) {
  mainServo.write(90);
  delay(1000);
 } else {
  mainServo.write(0);
  delay(1000);
 }
 if (digitalRead(4) == 1) {
  digitalWrite(13, HIGH);
  //delay(1000);
 } else {
  digitalWrite(13, LOW);
  //delay(1000);
 }

 gassensor = analogRead(A0);
 if (gassensor >= 250) {
  tone(12, 523, 1000);
  delay(10);
 }
```

```
}
```