

```
#include <Wire.h>
#include <LiquidCrystal_I2C.h>
#include <Servo.h>

LiquidCrystal_I2C lcd(0x3F,16,2);
Servo myservo;

int sw = 2;
int sensor = A0;
int buzzer = 8;
void setup()
{
  pinMode(sw, INPUT);
  digitalWrite(sw, HIGH);
  myservo.write(0);
  delay(1000);
  lcd.begin();
  lcd.setCursor(0,0);
  lcd.print("ALAT PENDETEKSI");
  lcd.setCursor(1,1);
  delay(1000);
  lcd.print("KEBOCORAN GAS");
  delay(1000);
  lcd.clear();
  lcd.setCursor(3,0);
  lcd.print("M RISYAD R");
  lcd.setCursor(1,1);
  delay(500);
  lcd.print("0614 3032 1160");
  delay(500);
  lcd.clear();
  lcd.setCursor(0,0);
  lcd.print("Detecting...");
  delay(1000);
  lcd.clear();
  myservo.attach(9);
  pinMode(sensor, INPUT);
  pinMode(buzzer,OUTPUT);
  Serial.begin(9600);
}
```

```

void loop()
{
  lcd.setCursor(0,0);
  lcd.print("KADAR GAS : ");
  int val=analogRead(0);
  int up=analogRead(sensor);
  int nilaisensor = analogRead(0);
  val=map(val,0,1023,0,100);
  up=map(val,0,100,0,9800);
  float tegangan = nilaisensor*(5.0/1023.0);
  lcd.print(val);
  lcd.print("% ");
  Serial.print(val);
  Serial.println("%");
  Serial.println(nilaisensor);
  Serial.println(tegangan);

  if (digitalRead(sw) == LOW)
  { myservo.write(180);
  }
  if(val>30)
  {
  lcd.setCursor(0,1);
  lcd.print("BOCOR BESAR! ");
  buzzer2();
  delay(100);
  }

  else if(val>10)
  {
  lcd.setCursor(0,1);
  lcd.print("BAHAYA BOCOR! ");
  myservo.write(0);
  buzzer1();
  delay(100);
  }

  else if(val<10)
  {
  lcd.setCursor(0,1);
  lcd.print("TIDAK BOCOR ");
  delay(100);
  }
}

```

```
}}
```

```
void buzzer1()
```

```
{
```

```
  digitalWrite(buzzer, HIGH);
```

```
  delay(10);
```

```
  digitalWrite(buzzer, LOW);
```

```
  delay(100);
```

```
}
```

```
void buzzer2()
```

```
{
```

```
  digitalWrite(buzzer, HIGH);
```

```
  delay(10);
```

```
  digitalWrite(buzzer, LOW);
```

```
  delay(10);
```

```
}
```