

TIN KERCAD Gas Leakage monitoring sensor Saved

Code **Start Simulation** **Send To**

Text 1 (Arduino Uno R3)

```

1 #include <Servo.h>
2
3 Servo myservo;
4
5
6 #define ledR2 5
7 #define ledR1 4
8 #define ledY2 3
9 #define ledY1 2
10 #define ledG1 1
11 #define gas A0
12 #define buzzer 8
13 #define serv 9
14
15 void setup()
16 {
17   pinMode(ledR1, OUTPUT);
18   pinMode(ledR2, OUTPUT);
19   pinMode(ledY1, OUTPUT);
20   pinMode(ledY2, OUTPUT);
21   pinMode(ledG1, OUTPUT);
22   pinMode(buzzer, OUTPUT);
23   myservo.attach(serv);
24   pinMode(gas, INPUT);
25
26

```

Serial Monitor

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```

21   pinMode(ledG1, OUTPUT);
22   pinMode(buzzer, OUTPUT);
23   myservo.attach(serv);
24   pinMode(gas, INPUT);
25
26
27   Serial.begin(9600);
28 }
29
30 void loop()
31 {
32   int read= analogRead(gas);
33   int val= map(read,80,380,0,100);
34   Serial.println(val);
35
36   int servo= map(read,80,380,0,180);
37   myservo.write(servo);
38
39
40   digitalWrite(ledG1, HIGH);
41
42
43   if(val>=20 && val<40){
44     digitalWrite(ledY1,HIGH);
45
46

```

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```

40   digitalWrite(ledG1, HIGH);
41
42
43   if(val>=20 && val<40){
44     digitalWrite(ledY1,HIGH);
45
46
47
48   if(val>=40 && val<60){
49     digitalWrite(ledY2,HIGH);
50
51
52   if(val>=60 && val<80){
53     digitalWrite(ledR1,HIGH);
54
55
56   if(val>=80){
57     digitalWrite(ledG1, HIGH);
58     digitalWrite(ledY1, HIGH);
59     digitalWrite(ledY2, HIGH);
60     digitalWrite(ledR1, HIGH);
61     digitalWrite(ledR2, HIGH);
62
63     delay(500);
64
65

```

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Text

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```

59     digitalWrite(ledY2, HIGH);
60     digitalWrite(ledR1, HIGH);
61     digitalWrite(ledR2, HIGH);
62
63     delay(500);
64     digitalWrite(ledG1, LOW);
65     digitalWrite(ledY1, LOW);
66     digitalWrite(ledY2, LOW);
67     digitalWrite(ledR1, LOW);
68     digitalWrite(ledR2, LOW);
69
70     delay(1000);
71
72     tone(buzzer,1000,500); // function that allows you to set
73
74 }
75
76 if (val<80){
77     noTone(buzzer);
78 }
79
80
81
82 }

```

Serial Monitor

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Code

Initializing...

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```

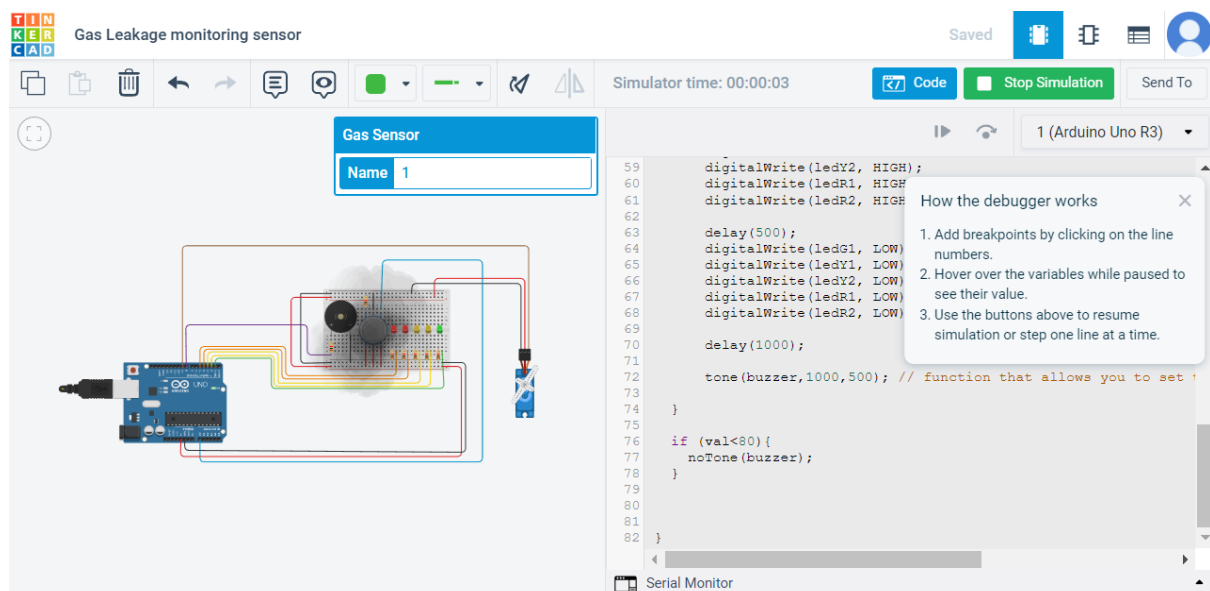
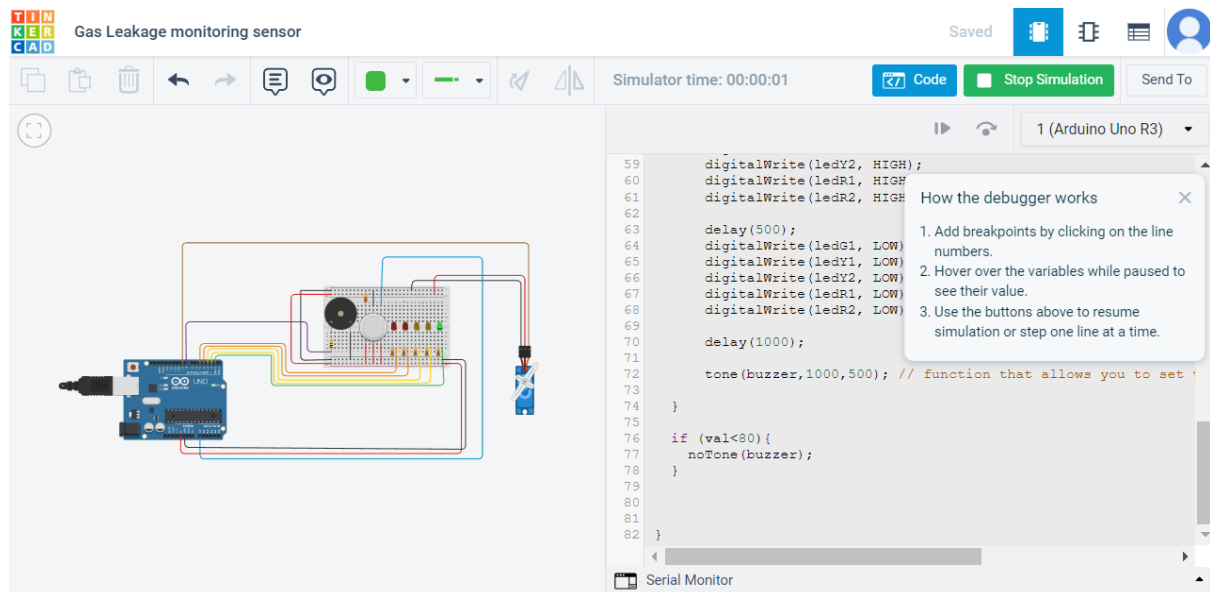
59     digitalWrite(ledY2, HIGH);
60     digitalWrite(ledR1, HIGH);
61     digitalWrite(ledR2, HIGH);
62
63     delay(500);
64     digitalWrite(ledG1, LOW);
65     digitalWrite(ledY1, LOW);
66     digitalWrite(ledY2, LOW);
67     digitalWrite(ledR1, LOW);
68     digitalWrite(ledR2, LOW);
69
70     delay(1000);
71
72     tone(buzzer,1000,500); // function that allows you to set
73
74 }
75
76 if (val<80){
77     noTone(buzzer);
78 }
79
80
81
82 }

```

Serial Monitor

How the debugger works

1. Add breakpoints by clicking on the line numbers.
2. Hover over the variables while paused to see their value.
3. Use the buttons above to resume simulation or step one line at a time.



<https://www.tinkercad.com/things/kLKYS DPw44s-dazzling-kasi/editel?tenant=circuits>