

Program no : 11

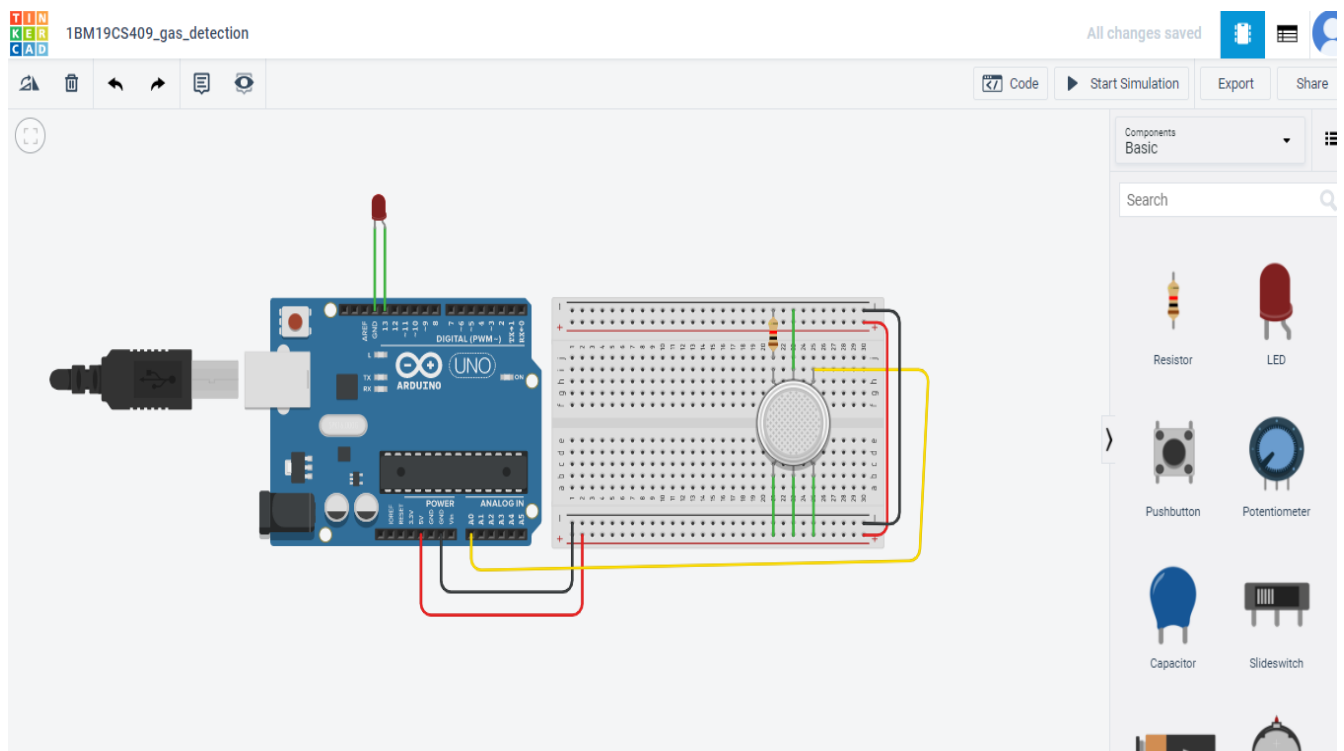
Program Title : Gas detector

Aim : Designing a circuit to glow LED when the gas is detected.

Hardware Required

- Arduino Board
- Wires
- Breadboard
- LED
- Gas sensor
- Resistor

Circuit Diagram :



Code:

Sumalata
IBMIACS409

Ajoy

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Program - 11
Gas detection

```
int redLed = 13;  
int Smoke = A0;  
void Setup()  
{  
  pinMode(redLed, OUTPUT);  
  Serial.begin(9600);  
}  
void loop()  
{  
  int analogSensor = analogRead(Smoke);  
  Serial.println(analogSensor);  
  if (analogSensor >= 100)  
  {  
    digitalWrite(redLed, HIGH);  
    Serial.println("Smoke DETECTED");  
  }  
  else  
  {
```

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```
    digitalWrite(redLed, LOW);  
    Serial.println("NO SMOKE DETECTED");  
  }  
  delay(2000);  
}
```

```
int redLed = 13;  
int smoke = A0;  
void setup()  
{  
  pinMode(redLed, OUTPUT);  
  Serial.begin(9600);  
}  
  
void loop()  
{  
  int analogSensor = analogRead(smoke);  
  Serial.println(analogSensor);  
  if(analogSensor >= 100)  
  {  
    digitalWrite(redLed, HIGH);  
    Serial.println("SMOKE DETECTED");  
  }  
  else  
  {  
    digitalWrite(redLed, LOW);  
    Serial.println("NO SMOKE DETECTED");  
  }  
  delay(2000);  
}
```

Observation /Output :

TINKERCAD 1BM19CS409_gas_detection All changes saved

Simulator time: 00:00:18

Code Stop Simulation Export Share

Gas Sensor
Name 1

```
1 int redLed = 13;
2 int smoke = A0;
3 void setup()
4 {
5   pinMode(redLed, OUTPUT);
6   Serial.begin(9600);
7 }
8
9 void loop()
10 {
11   int analogSensor = analogRead(smoke);
12   Serial.println(analogSensor);
13   if(analogSensor >= 100)
14   {
15     digitalWrite(redLed, HIGH);
16     Serial.println("SMOKE DETECTED");
17   }
18   else
19   {
20     digitalWrite(redLed, LOW);
21     Serial.println("NO SMOKE DETECTED");
22   }
23   delay(2000);
24 }
```

Serial Monitor

89 NO SMOKE DETECTED
97 NO SMOKE DETECTED
296 SMOKE DETECTED
296 SMOKE DETECTED

Send Clear