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MQ-135 Air Quality Detection Sensor Module

Introduction:

MQ-135 is an air quality or air pollution measuring sensor device. It can detect various chemical contents in air and give appropriate voltage variation at the output pin depending on the chemical concentration in air.

It can detect alcohol, Benzene, smoke, NH3, butane, propane etc. if anyone of the stated chemical concentration rises, the sensor convert the chemical concentration in air to appropriate voltage range, which can be processed by Arduino or any microcontroller. It cannot tell what kind of chemical concentration rose in the air.

Components:

- Arduino Uno Board (1)
- MQ-135 Air Quality Detection Sensor Module
- USB Cable
- Several Jumper Wires

Objective:

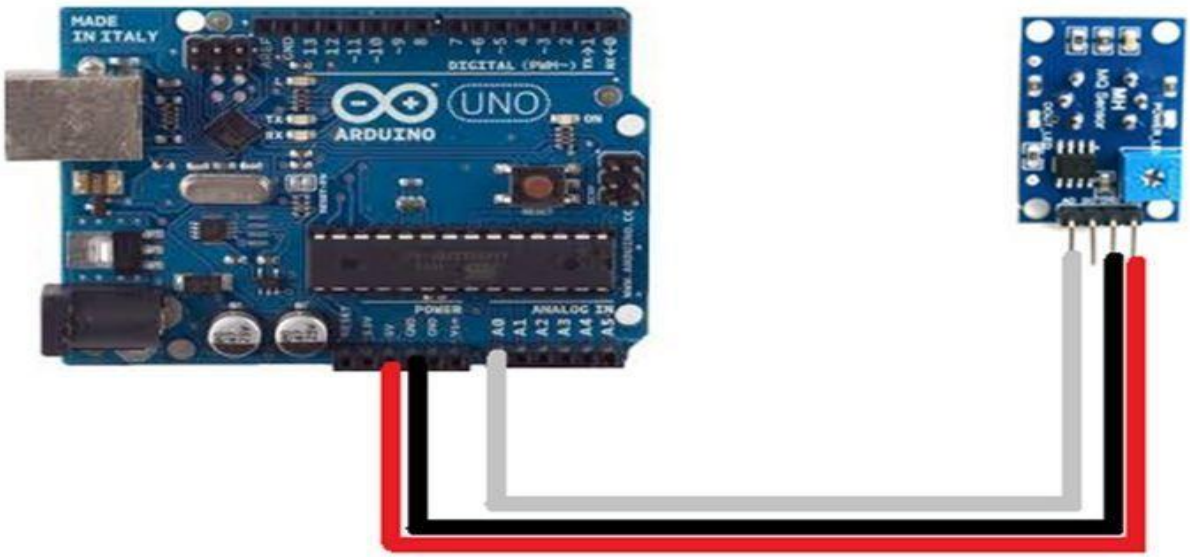
To detect various chemical contents in air and give appropriate voltage variation at the output pin depending on the chemical concentration in air.

Procedures:

Step 1: Build the circuit.

The connection between the MQ-135 Air Quality Detection Sensor Module and the Arduino Uno Board:

MQ-8 Hydrogen Gas Sensor	Arduino Uno
VCC	**5V**
GND	**GND**
A0	**A0**



Step 2: Insert the sample programming provided below by copy and paste it into Arduino IDE.

```
int sensorValue;
int digitalValue;
void setup()
{

Serial.begin(9600); // sets the serial port to 9600
pinMode(13, OUTPUT);
pinMode( 3, INPUT);

}

void loop()
```

```
{

sensorValue = analogRead(0); // read analog input pin 0

digitalValue = digitalRead(2);
if(sensorValue>400)
{
digitalWrite(13, HIGH);
}
else
digitalWrite(13, LOW);
Serial.println(sensorValue, DEC); // prints the value read
Serial.println(digitalValue, DEC);

delay(1000); // wait 100ms for next reading

}
```

Step 3: Open the serial monitor to observe the result as shown below.