A gas sensor is a device that detects the concentration of a specific gas in the air. The sensor also has an adjustable threshold that can be used to detect the presence of a gas within a certain range. However, we'll simply get the concentration of the gas in the air.

Note that there are multiple types of gas sensors, each designed to detect a specific gas. This same code and connection can be used for all the gas sensors.

We have the following sensors, and their respective gases:

- MQ-3: Alcohol, Ethanol, Smoke
- MQ-8: Hydrogen Gas
- MQ-135: Air Quality (Ammonia, Benzene, Smoke, CO2)

Hardware

- Gas Sensor
- Arduino
- Jumper Wires

Circuit

Connect the gas sensor to the Arduino as shown in the diagram. Here is a table of the connections for your reference:

Gas Sensor	Arduino
VCC	5V
GND	GND
OUT	Analog Pin A0

diagram

You're free to use any analog pin for the OUT pin, from A0 to A5. Just make sure to update the pin number in the code, as shown below in the `void setup()` function.

```
void setup() {
    initializeGasSensor(A0);  // Initialize the gas sensor on analog pin A0
}
```