```
// C++ code
//
int Led1=12;
int Led2=2;
int buzzer=7;

void setup()
{
  pinMode(Led1,OUTPUT);
  pinMode(Led2,OUTPUT);
  pinMode(buzzer,OUTPUT);
  Serial.begin(9600);
  pinMode(4,INPUT);

}
void loop()
{
  int ldr;
  int gas;
  int pir;

// ldr sensor and pir sensor
   ldr=analogRead(A0);
   Serial.print("ldr value:");
   Serial.println(ldr);

   pir=digitalRead(4);
   Serial.print("motion deteted:");
   Serial.println(pir);
```

```
 if(ldr<=200)
 {
  digitalWrite(Led1,HIGH);
  Serial.println("Led is ON");


       if(pir==1)
       {
         digitalWrite(Led2,HIGH);
         Serial.println("Led2 is OFF");
       }
 }
 else
 {
  digitalWrite(Led1,LOW);
  Serial.println("Led1 is OFF");
 }
delay(1000);
 // gas sensor
 gas=analogRead(A1);
 Serial.print("gas value;");
 Serial.println(gas);

 if(gas>=100)
 {
  digitalWrite(buzzer,HIGH);
  Serial.println("gas level is too high");
 }
```

```
  else
  {
digitalWrite(buzzer,LOW);
    Serial.println("gas level is normal");
  }
}
```