ASSIGNMENT1

```cpp
// C++ code
//
int Led1=8;

int Led2=4;

int buzzer=12;

void setup()
{
  pinMode(Led1, OUTPUT);

  pinMode(Led2, OUTPUT);

   pinMode(buzzer,OUTPUT);

  Serial.begin(9600);

  pinMode(7,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(7);

  Serial.print("motion detected:");

  Serial.println(pir);
```

```arduino
if(ldr<=100)
{
  digitalWrite(Led1,HIGH);
  Serial.println("Led1 is ON");


    if(pir==1)
     {
        digitalWrite(Led2,HIGH);
        Serial.println("Led2 is ON");
     }
    else
     {
        digitalWrite(Led2,LOW);
        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>=200)
{
```

```
    digitalWrite(buzzer,HIGH);

    Serial.println("gas level is too high");

  }

  else

{

    digitalWrite(buzzer,LOW);

    Serial.println("gas level is normal");

}

}
```