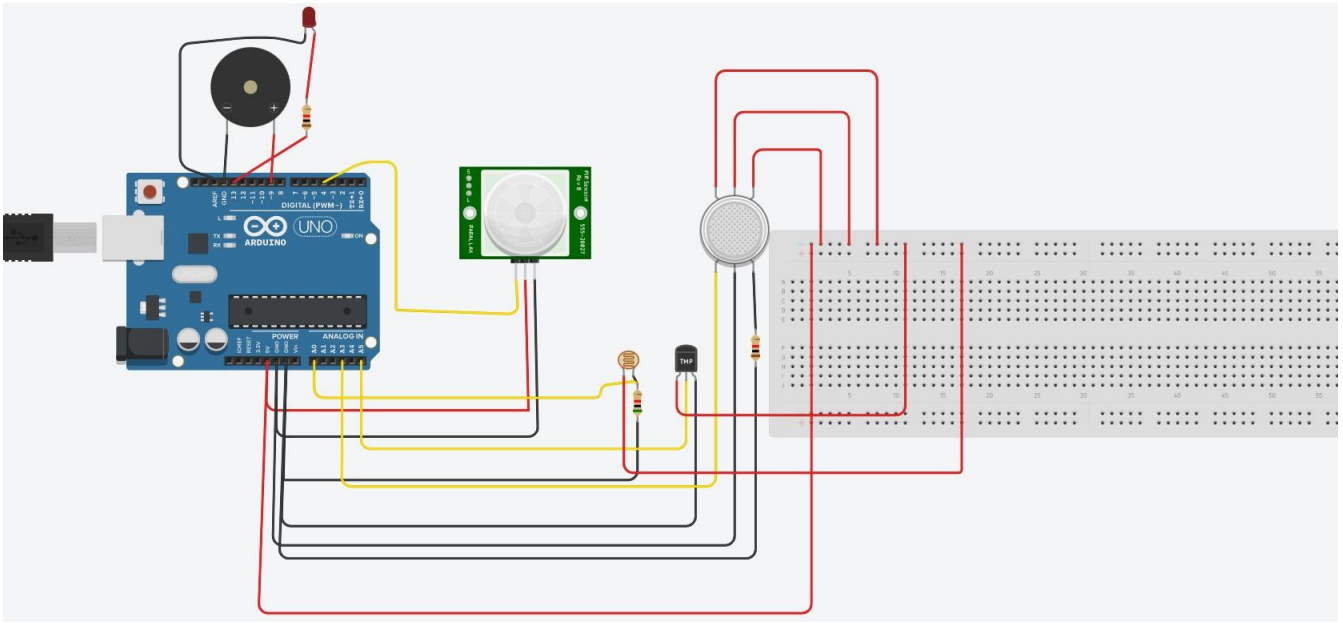
SMART HOME AUTOMATION (Using 2+ sensors, led, buzzer)

CIRCUIT DIAGRAM



CODE

```
// C++ code
//
void setup()
{
  pinMode(4,INPUT);
  pinMode(9,OUTPUT);
  pinMode(13,OUTPUT);
  Serial.begin(9600);
}

void loop()
{
  int m=digitalRead(4);
  int ldr=analogRead(A0);//ldr output
  double rv=((float)ldr/1023)*5;//resistor voltage
  double ldrv=5-rv;//ldr voltage
  double Rldr=(ldrv/rv)*5000;//reference resistor 5000 ohm
  double lux=12518931*pow(Rldr,-1.405);//light intensity
  Serial.print("motion detection:");
  Serial.println(m);
  Serial.print("lux:");
  Serial.println(lux);
  int gas=analogRead(A3);
  if(m==1)
  {
    if ((lux<=300)&&(m==1))
    {
      digitalWrite(13,HIGH);
    }
    else
    {
      digitalWrite(13,LOW);
    }
  }
  else
  {
    digitalWrite(13,LOW);
```

```
  }
  if(gas>300)
  {
    Serial.println("Smoke detected");
    digitalWrite(9,HIGH);
  }
  else
  {
    digitalWrite(9,LOW);
  }
  double  temp =analogRead(A5);
  Serial.print("temperature sensor output:");
  Serial.println(temp);
  double b=(temp/1024)*5;
  Serial.print("voltage reading:");
  Serial.println(b);
  double c=(b-0.5)*100;
  Serial.print("temperature:");
  Serial.print(c);
  Serial.println("c");


}
```