Question:

Write a program for smart home application using Arduino with any two sensors

Solution:

C++ CODE

```cpp
int t1=4;
int e1=5;
int buzzer=13;
void setup()
{
  Serial.begin(9600);
  pinMode(t1,OUTPUT);
  pinMode(e1,INPUT);
  pinMode(buzzer,OUTPUT);
  pinMode(9, OUTPUT);
}
void loop()
{
  digitalWrite(t1,LOW);
  digitalWrite(t1,HIGH);
  delayMicroseconds(10);
  digitalWrite(t1,LOW);
  float dur1 =pulseIn(e1,HIGH);
  float dis1=(dur1*0.0343)/2;
  //Serial.print("Distance is :");
  //Serial.println(dis1);
  buzzer=map(dis1,330,10,0,255);
```

```
analogWrite(13,buzzer);


int a=analogRead(A0);

int bb=map(a,0,1023,0,255);

Serial.println(bb);

if(bb>70){

 Serial.println("Smoke Detected");

 }

}
```