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SMART HOME

I have used 3 sensors in this project, 1st for smoke detection, 2nd for Door Sensor and 3rd for light on/off when sun rises or sets.

```
#include <LiquidCrystal.h>
LiquidCrystal lcd(12, 11, 5, 4, 3, 2);
void setup()
{
 lcd.begin(16, 2);
 lcd.print("--Smart Home--");
 pinMode(13, INPUT);
 pinMode(8, OUTPUT);
 pinMode(A5, INPUT);
 pinMode(7, OUTPUT);
 pinMode(A0, INPUT);
 pinMode(6, OUTPUT);
}
void loop()
{
 delay(500);
 lcd.clear();
 if (digitalRead(13) == 1) {
  digitalWrite(8, HIGH);
  tone(7,2000);
  lcd.setCursor(0,0);
  lcd.print("Knock Knock...");
```

```
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  delay(100);
  lcd.setCursor(0,1);
  lcd.print("Open The Door...");
 delay(100);
 }
 else {
  lcd.clear();
  noTone(7);
  digitalWrite(8, LOW);
 }
 if (analogRead(A5) >= 600) {
  tone(7,4000);
  lcd.setCursor(0,0);
  lcd.print("Danger !!!");
  lcd.setCursor(0,1);
  lcd.print("Smoke Alarm...");
 } else {
  lcd.clear();
  noTone(7);
 }
 if (analogRead(A0) >= 550) {
  analogWrite(6, 10);
 } else {
  if (analogRead(A0) >= 450) {
   analogWrite(6, 50);
  } else {
   if (analogRead(A0) >= 350) {
    analogWrite(6, 100);
   } else {
    if (analogRead(A0) >= 250) {
```

```
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```

```
analogWrite(6, 150);
    } else {
     if (analogRead(A0) >= 150) {
      analogWrite(6, 200);
     } else {
      if (analogRead(A0) >= 50) {
       analogWrite(6, 230);
      } else {
       analogWrite(6, 1000);
      }
     }
    }
   }
  }
delay(10);
}
```