**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...");

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) {

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);

}